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Nebraska



in Turkey

semiannual report
turkish university
program

A.I.D.
Reference Center
Room 1356 NS

Oct. 1, 1962
Mar. 31, 1963

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UNIVERSITY OF NEBRASKA - AID CONTRACT PROGRAM

In accordance with provisions of Contract No. AID-W-610
Appendix A - Article IV, we submit herewith the semiannual
progress report covering the period October 1, 1962 to
March 31, 1963.

Jason S. Webster
Coordinator
Univ. of Nebr. Turkish Program

UNIVERSITY OF NEBRASKA-AID CONTRACT

Entered into - March 28, 1955

Amendments - May 3, 1955
June 29, 1955
August 5, 1955
September 19, 1955
March 16, 1956
July 3, 1956
September 22, 1956
January 5, 1957
November 22, 1957

Superseded by New Contract, May 1958 to extend to December 31, 1960

Amendments -- (1) June 1959
(2) September 1959
(3) June 1960 - Extended contract to June 30, 1962
(4) May 24, 1962 - Extends contract to June 30, 1964

SCOPE: Render technical advice and assistance to Turkey for the purpose of:

1. Creating a new Land-Grant-Type University at Erzurum, Turkey.
2. Training its faculties of Agriculture and supporting fields.
3. Developing and strengthening Ankara University's program in Agriculture, Home Economics and Veterinary Medicine. (The Agriculture and Veterinary Medicine programs are being phased out as of June 30, 1963. It is planned that the program for Home Economics will continue through 1964.)

Conditions Governing Operations: Services provided in Turkey are an integral part of the United States aid and will be performed under the general policy guidance of the USAID Director; the University of Nebraska will be responsible for all professional and technical details of the contract and shall keep the USAID Director currently informed of the progress of the project.

COORDINATOR'S COMMENTS

By

Jason S. Webster

The significant event during this period in the development of Ataturk University has been the move to the new campus. The Chemistry building was sufficiently completed so that all classes and laboratories can be conducted in it. It also accommodates all offices and the library. The faculty apartment buildings and the student dormitory provide accommodations for most of the faculty and students.

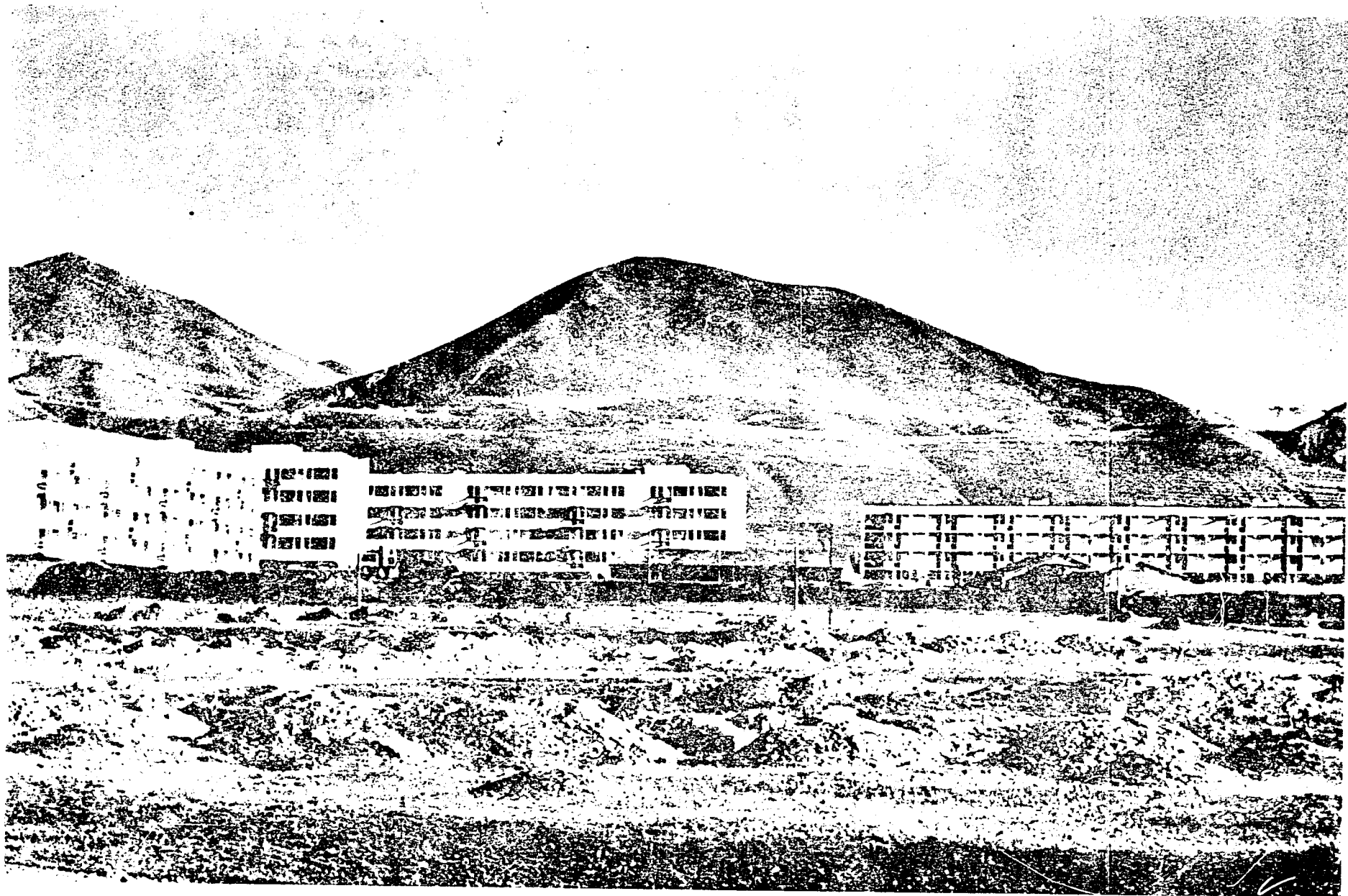
The photograph of the apartment buildings in this report shows the setting of the University just outside the City of Erzurum at the base of the mountains. The University land extends from the campus across a broad valley of fertile land, consisting of 10,000 acres.

The other photograph illustrates work that is being conducted in research and agricultural extension. The Erzurum area may become an important source of head lettuce for Turkey as a result of such research and encouragement given to villagers in this area through agricultural extension work. Encouraging results are also being obtained in the production of tomatoes and sweet corn, also in increased yields of potatoes and sugar beets with the use of improved varieties and fertilizer. The production of grass and legume seeds in this area could become important farming enterprises and thereby relieve this shortage in Turkey and possibly develop into important commodities for export. The improvement of pastures and forages together with the research in livestock production will greatly spread the influence of Ataturk University. The expansion and improvement of irrigation in this part of Turkey can be expected through the influence of the Agricultural Engineering Department. Ataturk University is truly becoming a "Peoples' University" similar to the Land-Grant Universities in the United States.

Dr. Marvel L. Baker, who has provided leadership to the Turkish Program in various capacities since its inception, has been back with the Animal Husbandry Department on the Nebraska campus during this period. He still serves the program by being readily available for advice and ideas for improving the program.

We feel fortunate that the Harold Allens have agreed to move from Ankara to Erzurum for the next two years and that Mr. Allen will continue to serve as Chief Advisor. They will be in the United States this summer on home leave.

The Arts and Literature faculty of Ataturk University was greatly strengthened in February by Dr. Edgar Palmer and Dr. Bryant Harrell joining the Nebraska staff. Dr. Palmer is directing the work in Economics and Dr. Harrell in Chemistry. Miss Shirley Crawford joined the group at Erzurum in March as Secretary.



Apartment Buildings For The Faculty On Ataturk University Campus



Dr. Ali Istar, Dr. Fahrettin Tosun, Prof. Ernest Wheeler and
Dr. Sabahattin Senol Inspecting Head Lettuce at Ataturk
University's Experimental Farm.

PARTICIPANT PROGRAM

A total of 150 Turkish participants have studied in the United States under the contract since its inception in 1955. One hundred thirteen were from Ankara University and 37 from Ataturk University. Fifteen participants are studying in the United States at the present time; 9 from Ankara University and 6 from Ataturk University. Of these, 6 are independently financed; 5 from Ankara and 1 from Ataturk.

New Arrivals During Period October 1, 1962 to March 31, 1963 - None

Departures During Period October 1, 1962 - March 31, 1963

Ankara - 6 departed

Akpinar, Cemalettin - February 9, 1963
Altan, Yasar - November 17, 1962
Isikan, Mustafa - January 27, 1963
Mimioglu, Mihri - October 15, 1962
Pekel, Erdogan - January 25, 1963
Tolkun, Selim - October 15, 1962

Ankara - 2 transferred from AID Sponsorship

Alpan, Orhan -- December 31, 1962
Tigin, Yilmaz -- December 31, 1962

Ataturk - 1 transferred from AID Sponsorship

Firater, Nezihe -- January 31, 1963

Extensions Granted During Period October 1, 1962 - March 31, 1963

Ankara - 2

Alpan, Orhan - program extended for two years under the sponsorship of Oregon State University.

Tigin, Yilmaz - program extended for six months under the sponsorship of the University of Nebraska.

Ataturk - 3

Aksoy, Necati - extended under AID until August 15, 1963.

Firater, Nezihe - Miss Firater will be independently financed. Her program is extended to August 15, 1963.

Gullap, Talat - extended under AID until July 1, 1963.

Ankara Participants in the United States under our program on March 31, 1963

Name	Field of Interest	Location	Date of Arrival	Termination of Program
Alpan, Orhan ¹	Ani. Breed.	Ore. St. Univ.	Jan. 22, 1962	Dec. 31, 1962
Aydeniz, Akgun	Soil Sci.	Univ. of Nebr.	Sept. 14, 1962	Sept. 13, 1963
Dogan, Refika ²	Home Ec.	Univ. of Nebr.	Feb. 1, 1958	Feb. 1, 1960
Erel, Sevim Guney	Home Ec.	No.Dak.St.Univ.	Sept. 4, 1962	Sept. 3, 1963
Kaptan, Kemal	Ag. Ext.	Univ. of Nebr.	Sept. 4, 1962	Sept. 3, 1963
Keskintepe, Hamza ³	Vet. Bact.	Univ. of Nebr.	Aug. 28, 1961	June 27, 1962
Senel, Servet	An. Nutr.	Univ. of Nebr.	Aug. 31, 1961	Aug. 30, 1963
Tekeli, Sait ⁴	Vet. Path.	Univ. of Wisc.	Jan. 20, 1960	Jan. 19, 1962
Tigin, Yilmaz ⁵	Vet. Paras.	Univ. of Nebr.	Jan. 28, 1962	Dec. 31, 1962

¹Orhan Alpan will be under the sponsorship of Oregon State University. His program has been extended to January 20, 1965.

²Refika Dogan is studying at the University of Nebraska and is independently financed.

³Hamza Keskintepe will be under the sponsorship of the Department of Veterinary Science, University of Nebraska, until June 30, 1964.

⁴Sait Tekeli will be under the sponsorship of the University of Wisconsin until January 19, 1964.

⁵Yilmaz Tigin will be under the sponsorship of the Department of Veterinary Science, University of Nebraska. His program has been extended to July 27, 1963.

Ataturk Participants in the United States Under Our Program on March 31, 1963

Name	Field of Interest	Location	Date of Arrival	Termination of Program
Aksoy, Necati	Soils Sci.	Univ. of Nebr.	Jan. 27, 1961	Aug. 15, 1963
Firater, Nezihe ¹	Dairy Tech.	Univ. of Nebr.	Jan. 24, 1961	Jan. 31, 1963
Gullap, Talat	Economics	Univ. of Nebr.	Jan. 27, 1961	July 1, 1963
Hatunoglu, Turgut ²	Ag. Econ.	Mont. St. Col.	Feb. 12, 1962	Aug. 11, 1963
Turkdogan, Orhan ²	Rural Soc.	Univ. of Mo.	Sept. 4, 1962	Sept. 3, 1963
Zoral, Kutlu ²	Ag. Econ.	Mont. St. Col.	March 8, 1962	Sept. 7, 1963

¹Nezihe Firater is studying at the University of Nebraska and is independently financed. Her program has been extended without AID sponsorship until August 15, 1963.

²Drs. Hatunoglu, Turkdogan and Zoral may remain for an additional year if they make acceptable progress.

UNIVERSITY OF NEBRASKA-AID CONTRACT TURKISH PROGRAM

PERSONNEL

ADMINISTRATIVE COMMITTEE

Chairman.....Dr. E. F. Frolik, Dean
College of Agriculture

Secretary.....Jason S. Webster, Coordinator
Univ. of Nebr. Turkish
Program

Members: Albin T. Anderson
E. C. Conard
Otto G. Hoiberg
G. A. Young

HOME STAFF

Coordinator.....Jason S. Webster

Secretaries.....Frances Lawritson
Mary Peo

Finance Officer.....Ruth Swanson

Home Office: 104 Ag. Admn. Annex
College of Agriculture
University of Nebraska
Lincoln, Nebraska

PERSONNEL
UNIVERSITY OF NEBRASKA STAFF IN TURKEY

During Period October 1, 1962 to March 31, 1963

<u>Name</u>	<u>Position</u>	<u>Period of Assignment</u>	
		<u>From</u>	<u>To</u>
Alexander, M. A.	Animal Husbandry Specialist Appointed Acting Chief-- Ataturk University Adviser	Sept. 15, 1959	Aug. 31, 1963
Allen, Harold L.	Extension & Information Specialist--Ankara Univ. Appointed Chief of Staff-- August 15, 1962	Sept. 17, 1956	June 30, 1963 ¹
² Ames, Mercedes	Secretary--Ataturk Univ.	Sept. 5, 1961	Feb. 13, 1963
³ Crawford, Shirley	Secretary --Ataturk Univ.	March 1, 1963	March 20, 1965 ⁴
Fenske, Leo J.	Farm Management Specialist, Ataturk University	Sept. 22, 1960	November 1964 ⁴
² Frutchey, Cecil W.	Chief, Erzurum Group-- Ataturk University	Sept. 1, 1962	March 12, 1963
³ Harrell, Bryant	Professor of Chemistry, Ataturk University	Feb. 1, 1963	Feb. 17, 1965 ⁴
Morrow, Evelyn	Home Economist-- Ankara University	Jan. 1, 1959	June 30, 1963
³ Palmer, Edgar Z.	Professor of Economics, Ataturk University	Feb. 1, 1963	Feb. 17, 1965 ⁴
McCullough, Sally	Administrative Secretary Ankara, Turkey	Nov. 29, 1960	Jan. 26, 1965 ⁴
Steele, John C.	Ag. Engr. Specialist-- Ataturk University	Sept. 15, 1962	Sept. 20, 1964 ⁴
² Swanstrom, Wylene	Secretary--Ankara Univ.	July 5, 1961	Jan. 31, 1963
Vennix, Arthur J.	Prof. of Library Science, Ataturk University	July 1, 1962	Aug. 18, 1964 ⁴
Wheeler, Ernest J.	Crops Specialist-- Ataturk University	Sept. 6, 1960	Sept. 20, 1963 ¹
Winter, John M.	Botanist, Ataturk Univ.	May 22, 1961	June 3, 1963 ¹

¹Extensions have been requested for Wheeler to February 1964 and Winter to July 10, 1963. An extension will be requested for Allen to August 1965.

²Departed from Turkey during this period.

³Arrived in Turkey during this period.

⁴Or to the end of the contract, whichever comes first.

REPORT

By

Harold L. Allen
Chief of Staff

I

Administrative Comment and Summary

Ataturk University began its fifth year of operation at the beginning of the report period. Between semesters, the entire University moved to the new campus. Construction of the Chemistry Building and the Student Dormitory moved rapidly from early September 1962, and both buildings are now occupied. Additional physical facilities, including the Social Science Building, should be completed by the opening of the 1963-64 school year.

Morale of the American and Turkish staff appeared high at the close of the report period, in spite of the first student strike in five semesters at Ataturk University. The Faculty of Agriculture students began boycotting classes March 11, but returned to class March 27. Reason for the strike was a misunderstanding of student regulations.

The University of Nebraska staff in Turkey continued to function in an outstanding manner. Professor M. A. Alexander is due special thanks for assuming additional duties as Ataturk University Advisor upon the departure of Professor Frutchey in mid-February. Professor Fenske has been of great assistance in the processing of the participant nominees and in organizing the pre-registration of students, in addition to his regular duties. Professors Wheeler and Steele have assisted greatly by looking after house furnishings and the official automobiles. Professors Winter and Harrell did yeoman service in conducting the inventory of equipment purchased for Ataturk University. Professors Vennix and Morrow continued their excellent service to their respective departments. Professors Palmer and Harrell, and Miss Crawford quickly and quietly assumed their duties upon their arrival. Miss McCullough continued her excellent work in handling the many details which form an important part of the program. Wives also contributed greatly to the program. Mrs. Steele and Mrs. Palmer are both teaching in the English Department at Ataturk University. Mrs. Fenske is conducting an English-Orientation course for the wives of participant nominees. Mrs. Alexander, Mrs. Wheeler and Mrs. Winter participate in the many activities in the Erzurum area. And, Mrs. Allen has continued her work as A.I.D. Orientation Officer and Editor of the weekly A.I.D. Memoire.

The cooperation received from the A.I.D. Food and Agriculture Division, particularly that of Mr. Wesley S. Smith, has been outstanding during the report period. The active interest and assistance of Director Van Dyke and Assistant Director Hamer is greatly appreciated.

The Coordinator of the University of Nebraska Turkish Program, Jason S. Webster, and his staff in Lincoln continued to give excellent service to the Group in Turkey.

II.

Personnel

Personnel actions during the period included:

A. Arrivals

1. Prof. and Mrs. Edgar Z. Palmer arrived in Ankara on February 17, 1963 to begin a two-year tour of duty as Professor of Economics at Ataturk University.
2. Prof. Bryant E. Harrell arrived in Ankara on February 17, 1963, to begin a two-year tour of duty as Professor of Chemistry at Ataturk University. Mrs. Harrell and their three children are scheduled to arrive in Turkey in June.
3. Miss Shirley L. Crawford arrived in Ankara on March 20, 1963 to begin a two-year tour of duty as Secretary of the Nebraska Group at Ataturk University.

B. Leaves

Miss Sally A. McCullough departed from Ankara on December 7, 1962 for home leave. Miss McCullough returned to Ankara January 26, 1963 and resumed her duties as Administrative Secretary to the Nebraska Group.

C. Departures

1. Miss Mercedes Ames departed from Turkey on January 30, 1963. She had served as Secretary to the Nebraska Group in Erzurum.
2. Mrs. L. Wylene Swanstrom Twombly resigned from the position of Secretary on January 31, 1963 to join her husband in Yalova, Turkey.
3. Dr. Cecil Frutchey departed from Turkey on February 22, 1963. He had served as Ataturk University Advisor in Erzurum.

D. Staff Vacancies

With the arrival of Professors Palmer and Harrell, and Miss Crawford, the only position open on the University of Nebraska Staff in Turkey was Professor of Soil Science. This position has been vacant since the death of Professor Horace Harper on November 8, 1961.

III.

Participant Program

A. Ataturk University

1. The following participants were in the United States during the period:

Nezihe Firater (Dairy Technology)
Necati Aksoy (Soil Science)
Talat Gullap (Economics)
Turgut Hatunoglu (Agricultural Economics)
Kutlu Zoral (Agricultural Economics)
Orhan Turkdogan (Rural Sociology)

2. Extensions to work programs were granted for the following Participants:

Nezihe Firater, from January 22, 1963 to August 15, 1963, to be financed outside of the University of Nebraska Participant Program.

Necati Aksoy, from January 25, 1963 to August 15, 1963, to be financed under the University of Nebraska Participant Program.

Talat Gullap, from January 25, 1963 to July 1, 1963, to be financed under the University of Nebraska Participant Program.

3. The following individuals were nominated by Ataturk University to become participants under the University of Nebraska Program. Bio-data forms were completed, and proposed work programs prepared for each of the individuals. As many as nine could be sent to the United States in the fall of 1963, with the remainder scheduled to depart from Turkey in calendar year 1964.

Sabahattin Senol - Plant Science
Ayhan Aksoy - Animal Science-Extension
Ergun Kip - Agricultural Economics
Hayati Celebi - Soil Science
Nevzat Sisman - Agricultural Engineering
Atilla Yildiz - Chemistry
Nuran Ozalp - Physics
Mehmet Duzkaya - Mathematics
Muserref Aysay - Library Science
Ismet Baysal - Plant Science
Abdurbaki Pirimoglu - Economics
Ali Ozdengiz - Agricultural Engineering
Necdet Leloglu - Bacteriology
Sara Beygu - Chemistry
Nazmi Oruc - Soil Science

B. Ankara University

1. The following participants from Ankara University were in the United States for the entire period:

Dr. Sevim Guney Erel (Home Economics)
Dr. Kemal Kaptan (Agricultural Extension)
Dr. Akgun Aydeniz (Soil Science)
Dr. Orhan Alpan (Animal Breeding)
Servet Senel (Animal Nutrition)
Dr. Yilmaz Tigin (Parasitology)

2. Extensions to work programs were granted for the following participants:

Dr. Orhan Alpan, two years, to be financed outside of the Nebraska Program.

Dr. Yilmaz Tigin, one year, to be financed outside of the Nebraska Program.

3. The following individuals completed their programs and returned to Turkey during the report period:

Doc. Dr. Mustafa Isikan (Plant Breeding)
Doc. Dr. Cemalettin Akpınar (Poultry Husbandry)
Dr. Erdogan Pekel (Animal Breeding)
Prof. Dr. Yasar Altan (Veterinary Science)
Prof. Dr. Mehmet Mimioglu (Veterinary Science)
Doc. Dr. Selim Tolkun (Veterinary Science)

IV.

Equipment and Physical Facilities

A. Equipment Audit

During the report period, a complete listing of all expendable and non-expendable materials purchased for Ataturk University with Defense Support and Contract Commodity Funds from inception of the contract to September 30, 1962, was prepared for use in the audit conducted by A.I.D./Turkey. Defense Support Funds expended totaled \$135,672. Contract Commodity Fund expenditures totaled \$140,752.17, this listing alone comprised more than 1800 individual items. In connection with the audit, arrival and departure dates for each staff member, leave records, and participant summaries were also prepared and submitted.

B. Ataturk University

1. Equipment Orders

a. Six orders for materials were placed for the Plant Science, Animal Science and Library Science Departments. (Orders No. 51 thru 56).

b. The following were received:

- (1) Part of Order No. 53 for seed, via APO.
- (2) Part of Order No. 49 for the Animal Science Department, shipped under Bill of Lading No. 191, dated November 1, 1962.
- (3) Order No. 51 for the Botany Department, via APO.

c. The following was shipped and is now in Turkish Customs:

Part of Order No. 49, all of Order No. 50, on Bill of Lading No. 27, dated February 20, 1963.

d. An inventory of all equipment purchased for the University with

Contract Commodity Funds and Defense Support Funds was taken, and a majority of the equipment was assigned to departments and put into use. A central chemical stores was in the process of being organized.

2. Buildings

a. Faculty Housing

The four faculty housing units, totaling 120 family and bachelor apartments, were completed and fully occupied during the period. Semi-administrative personnel moved into the laborer's housing units constructed during the summer and fall season.

b. Student Dormitory

The student dormitory was completed and occupied at the beginning of the second semester, March 4, 1963. About 300 male students are residing in the dormitory. In addition, dining facilities for the student body and faculty are in operation in the building.

c. Chemistry Building

The Chemistry Building was occupied in February, and classes opened in the building March 4. The building houses the entire teaching and administrative staff of the University, and all classes are held in the building. The University has now completely moved to the new campus. The interior of the Chemistry building is not yet complete, in that the ceilings of all rooms, and some other interior furnishings needs to be installed. It is anticipated the finishing work will be completed before the opening of the 1963-64 school year. Laboratory facilities for student teaching were greatly enhanced with the move into the new building, and large, individual laboratories were assigned to the Chemistry, Zoology, Botany, Bacteriology, Soils, and Plant Science Departments. Smaller laboratories have been assigned to Animal Nutrition, Physics, Mathematics, etc.

d. Social Science Building, Agricultural Faculty Buildings, Dairy Technology Building

Construction was at a standstill during the report period on these buildings.

e. Livestock Barns

The beef cattle and dairy cattle barns were being used to house cattle and sheep during the winter months, although they were not completely finished. A severe windstorm in March caused extensive damage to the sheep and beef cattle barns. Most of the damage was due to improper construction techniques in securing the roofs of the open-shed areas to the foundations.

f. Turkish Fiscal Year 1963 Building Program

The Ataturk University, Ministry of Education and Ministry of Finance Budgets for TFY 1963 include T.L. 24,000,000 for the Ataturk University Building Program. The proposed expenditures for this amount are:

T.L. 1,000,000 to complete Chemistry Building
T.L. 3,000,000 to complete Social Science Building
T.L. 4,000,000 to continue construction of Agriculture Faculty Buildings, including the completion of one.
T.L. 2,000,000 to start construction of a Student Dormitory
T.L. 2,000,000 for construction of Faculty Housing Unit.
T.L. 1,500,000 to start construction of University Library Building
T.L. 1,000,000 for campus road construction
T.L. 2,500,000 for water system and underground utility systems
T.L. 500,000 for sewage system
T.L. 2,000,000 for administrative costs
T.L. 4,000,000 for retirement of last year's debts
T.L. 500,000 for preparation of plans for Agricultural Economics and Animal Science Building

The legal exchange rate is \$1.00 equals 9 T.L.

In addition, construction of a girls' dormitory, student infirmary, and a central heating plant for the University is under consideration. Conversion from coal to fuel oil for heating is also under consideration.

C. Ankara University

1. Equipment

Two shipments of equipment were received. These were Bill of Lading No. 12, dated March 21, 1962, and Bill of Lading No. 156, dated April 4, 1962.

Four shipments of materials were in Customs at the close of the report period.

Orders for small replacement parts for equipment on hand were placed during the report period.

2. Home Economics Building

Construction of the Home Economics Building, which halted on July 2, 1962 due to difficulty in the transfer of funds for the work, was not resumed during the report period. Construction was scheduled to again get underway about April 1, 1963, and the building to be completed by mid-summer. The contractor for the building estimated T.L. 600,000 more than has been provided will be needed to complete the building as planned. The Faculty of Agriculture has requested the Ministry of Finance to release this amount to the Faculty so that the building may be completed

and put into operation before the opening of the 1963-64 school year. The funds had not been released at the end of the report period.

V.

The Program At Ankara University

A. Administrative Comment

1. Home Economics

The Home Economics position at Ankara University is now scheduled to be terminated June 30, 1963. The Faculty of Agriculture would like very much to have the position continued for a period of time, and there is general agreement among the Americans concerned that continued assistance would be of great value, providing:

- a. The Government of Turkey provides the Faculty of Agriculture with the T.L. 600,000 necessary to complete the Home Economics Building, and the Faculty of Agriculture can furnish the building adequately for full utilization;
- b. The Faculty of Agriculture grant teaching and research responsibility to the United States trained doctor assistants in keeping with their capabilities and the A.I.D. policy of not granting assistance to Universities where full utilization is not being made of qualified personnel;
- c. Adequate numbers of assistants be appointed to the Home Economics Department staff to assure a full compliment of Turkish personnel to conduct departmental activities, and in time for them to benefit from the training which could be offered by the continuation of an American specialist for a limited period of time;
- d. An adequate annual budget to cover all departmental activities be provided through the Faculty of Agriculture; and
- e. Competent, permanent, departmental administration be provided for in the Faculty of Agriculture's plan for departmental development.

Though these items were discussed in detail with the Faculty's administration many times in the past year, no definite steps of a positive nature had yet been taken on any of the five points at the close of the report period. In fact, the departmental budget for Turkish Fiscal Year 1963 (March 1, 1963 to February 29, 1964) was considerably less than had been promised by the Dean in December 1962.

2. Extension and Information

In view of the limited program in Extension and Information at the Ankara University Faculty of Agriculture, i.e. only offering a course in Extension Philosophy, Organization, Programs and Methods, no specialist assistance was provided during the report period. In spite of repeated submission of plans for expansion of the departmental activities and development, the Faculty has taken no steps to implement a broader extension program to include such activities as publication of extension (farmers') bulletins, initiate and conduct in-service courses and seminars, establishment of an extension institute, conduct practical research on extension programs and methods, etc. In fact, the present chairman of the department, who spent one year in the United States as a participant under the Nebraska program, has not so much as attended a single class lecture in extension in the more than six years since he returned from the United States.

In view of the lack of initiative and interest on the part of the Faculty in developing a full-scale departmental program in Extension and Information, it was felt the time of the specialist could better be utilized in other areas.

The Faculty has been informed that should it be ready to expand the services of the department, the Nebraska Group stands ready to assist in any way possible.

B. Home Economics

1. Student Enrollment

a. First Semester

Thirteen sophomore and twenty-five freshmen are now enrolled in the Home Economics major at the Ankara University Faculty of Agriculture.

2. Course Work

a. First Semester

Three courses were offered for the sophomore Home Economics majors. They were: Clothing and Textiles, Basic Nutrition, and Family Health. Dr. Ayse Erkut was primarily responsible for the Basic Nutrition course. Dr. Morrow assumed the basic responsibility for the Clothing and Textiles course, and Dr. Erkut and Dr. Morrow share the responsibility for the Family Health course. A major problem confronted in conducting the classes was the lack of adequate laboratory space.

b. Second Semester

The courses in Clothing and Textiles, Basic Nutrition, and Family Health are being continued. A suitable laboratory for the Clothing class has been found, and quality of the laboratory work done has

greatly improved. Turkish textbooks have been obtained for the Family Health class. Medical and first-aid kits have been obtained for laboratory use. Outlines for additional courses are in various stages of preparation.

3. Research Studies

Departmental staff members continued their research programs on living patterns, family nutrition, and child development. The Home Economics advisor also assisted two Ataturk University assistants with their research projects, which will be used for doctoral theses.

4. Tours, Field Trips

Two student tours were conducted. The Foods and Nutrition class visited the milk plant at Orman Ciftlik, and the Clothing and Textiles class visited the Ministry of Education's Home Economics Perfection School.

Dr. Kundak, Prof. Morrow and Dr. Elaine Smith of the American Embassy visited textile factories, glass factories, and home appliance factories in the Bursa, Gemlik and Istanbul areas to obtain information on availability and quality of locally manufactured articles. Two villages were visited to observe changes in laundry and bread-baking practices. The town of Ayas was visited to assist in planning a Mother-Child Care Program.

5. Equipment

A list of most-needed furniture items for the Home Economics Building was being prepared to submit to the Dean. Most items listed are to be constructed in the Faculty of Agriculture carpentry shop.

Some equipment was purchased locally for the Foods and Nutrition, Child Care, Home Management and Health laboratories.

One shipment of equipment purchased with contract funds arrived and was unpacked.

6. Special Activities

The Home Economics specialist spent considerable time:

- a. Assisting various GOT and international agencies with programs relating to home economics; and
- b. Assisting faculty staff members with lectures, abstracts and research summaries.

7. Participant Training

Dr. Sevim Erel is continuing her training program as a participant in the United States under the University of Nebraska Contract Program.

C. Extension and Information

1. Course Work

A two semester course, with laboratory, on Extension Philosophy, Organization, Programs, and Methods is being taught by Dr. Orhan Kural for senior students in the Faculty of Agriculture. This is the first year the course has been taught with no assistance from an American specialist.

2. Dr. Kemal Kaptan is continuing his training program in the United States as a participant under the University of Nebraska Contract Program.

VI.

Program At Ataturk University

A. Administrative Comment

1. Physical Facilities

Ataturk University moved to the new campus in February, 1963. All of the faculty members are now officed in the new Chemistry building and all classes and laboratories are conducted there. The new building provides a great deal more space for staff and teaching. Morale of the entire university seemed to raise as each truckload of furnishings was moved.

About 300 male students now reside in the new dormitory on the campus and around 60 female students are housed in one of the faculty apartment buildings. These are much improved facilities for student housing. About 200 students continued to live with family, relatives, or friends in the city of Erzurum.

2. Administration

Professor Dr. Eyub Hizalan continued as University Rector and Professor Dr. Lutfi Ulkumen as Dean of the Faculty of Agriculture for the entire period.

Professor Dr. Ahmet Ozel resigned as Dean of the Faculty of Letters and Science early in the report period. His successor is Professor Dr. Gunduz Akinci who arrived in Erzurum about January 1, 1963 and assumed the office of dean.

While the administrative procedures are generally satisfactory, there does seem to be a general lack of communication between the Deans (particularly Agriculture) and the Rector regarding faculty problems and administration. Many times the Rector pleads ignorance to real problems of which he should have been informed by the Deans and vice versa. For example, there seemed to be no administrative agreement between the Deans and Rector regarding how the student strike (see B below) should be handled.

3. Faculty Organization

The Faculty of Agriculture was apparently well organized with a function-

ing Council of Professors. Each department was headed by an active chairman and teaching and research programs appeared to be progressing satisfactorily. The Faculty of Letters and Science was woefully short of senior staff members and much of the teaching program the first semester was conducted without recognizable department organization. With the arrival of Professors Palmer and Harrell, it may now be possible to organize a Council of Professors in the Faculty of Letters and Science.

4. University Budget

The Ataturk University budget for Turkish Fiscal Year 1963 appears to be adequate to enable the University to carry out satisfactory programs in teaching, research, extension, farm development, and for expansion of physical facilities. The budget is discussed in greater detail below.

5. Departmental Programs

Each American professor at Ataturk University, as a part of his December 31, 1962 report, prepared an evaluation of the current situation within the department and projections for future development with outlines for additional staff and physical requirements, research programs, farm development, budget requirements, etc.

6. Proposed Ataturk University Law Changes

Docent Dr. Saban Karatas, a former participant and former Acting General Secretary of the University, prepared a draft law for Ataturk University which, if enacted, would bring about a strengthening of the University administration, develop a graduate school program patterned after universities in the United States, streamline and modernize academic advancement procedures based upon an individual's training and capabilities rather than length of service, and provide a more optimistic atmosphere for staff than now prevails. The draft has been submitted to the Minister of Education, secretaries of all political parties, and certain key members of both houses of the Grand National Assembly.

7. Miscellaneous

Other pertinent parts of the overall program at Ataturk University appeared to be progressing satisfactorily, including staff advancements, staff recruitment, etc.

8. Staff Morale

The morale of the University of Nebraska staff at Ataturk University appeared to be quite high at the close of the report period in spite of the uncertainties brought about by the student strike and certain administrative "tugs-of-war" within the Ataturk University administration. All staff members were busy carrying out current programs and planning expanded programs for the future.

B. Undergraduate Program

Ataturk University began classes for its fifth year of operation on October 8, 1962 with an enrollment of 566 students. There were 464 in the Faculty of Agriculture and 102 in the Faculty of Letters and Science. The freshman class numbered 274 students.

Near the end of the first semester, all Faculty of Agriculture students were pre-registered for the second semester. This marked the first time students were registered, and all classes scheduled by day, hour and room number for a semester before the close of the preceding semester. Students and faculty alike were impressed with the manner in which the registration-scheduling was carried out, and the efficiency of the system at the beginning of the semester.

Second semester classes opened March 4 in the Chemistry building on the new campus. Facilities are much improved for the conduct of courses in that a greater number of classrooms are available, and many more laboratories are available and are being utilized. Teaching and demonstration equipment which was previously held in storage was put into use, with a corresponding improvement in the quality of instruction being given.

Unfortunately, the Faculty of Agriculture students began boycotting classes on March 11, the first such action in five semesters. About a week later, the boycott turned into a strike over student regulations. The students returned to classes on March 27. At the close of the report period it had not been determined whether or not the students would receive credit for the semester. A faculty committee was working on a report and was to make recommendations regarding disciplinary action.

C. Research Work

1. Animal Science

Feeding experiments with various ages of cattle, with lambs, and a breeding experiment with sheep are being continued.

2. Agricultural Economics

A research project on sugar beet production is in an advanced stage. Another project on "An Economic Study of the Livestock Industry of Erzurum Province" is underway. Several other projects are being proposed.

3. Plant Science

Fifteen projects are in progress, all pointed to the production of food for people, forage and grain for livestock feeding, and pasture improvement. Crops being used in the experiments include alfalfa and other legumes, grasses, sugar beets, field and sweet corn, potatoes, head lettuce, tomatoes, and other vegetables. Work on crop rotations and stubble mulching, row spacing, etc., is also underway. Sweet corn and head lettuce are new crops to the Erzurum area, and both produced well.

New varieties of tomatoes have been introduced to the area. Some varieties of hybrid corn showed outstanding promise. During the winter, research continued in the greenhouse with projects on potato hybridization and grass and legume root and top development.

4. Agricultural Engineering

Current research projects include a study of the quality of the Erzurum Valley water, housing materials and construction methods for Eastern Turkey, power characteristics of batteries and generators for automobiles and tractors, operating characteristics of sprinkler irrigation systems for Eastern Turkey, and a study of the farm structures in Erzurum Province.

5. Soil Science

Several research projects are continuing in the Soil Science area, including fertilizer tests. There is cooperation between this department and other departments on various projects.

D. Staff Advancements

1. Docent Degrees

The following individuals were awarded docent degrees during the report period. All are former participants under the University of Nebraska program:

Ibrahim Aksoz (Agricultural Economics)
Kemal Biyikoglu (Animal Science)
Turgut Goksu (Animal Nutrition)
Saban Karatas (Animal Breeding)
Hasan Yuksel (Entomology)

2. Doctor Degrees

The following former participants received their doctorates during the report period:

Mehmet Aydin (Physics)
Ziya Alkan (Agricultural Engineering)
Hursit Ertugrul (Agricultural Engineering)
Lutfi Ogus (Soil Science)
Sabahattin Senol (Plant Science)(Participant under A.I.D. Program)

E. Staff Recruitment

Several new assistants were added to the kadro in departments to which American professors are assigned. These include:

Aydin Turkbali (Economics)
 Demir Aslan (Economics)
 Aynur Unal (Botany)
 Ozden Arun (Botany)
 Sefkati Gulden (Agricultural Economics)
 Huseyin Apan (Plant Science)
 Fuat Tariverdi (Plant Science)
 Erol Gunel (Plant Science)
 Caskun Koycu (Plant Science)

F. Ataturk University Budget

In addition to the T.L. 24,000,000 allocated to the University for the building program in Turkish Fiscal Year 1963, T.L. 6,000,000 was allocated for University operations, research programs, purchase of supplies and equipment, printing, etc. This compares to a budget of T.L. 5,500,000 in TFY 1962, out of which T.L. 400,000 was paid to rent the temporary quarters for the University. Thus, the budget is in reality about T.L. 900,000 larger than last year.

Staff salaries and farm operations are financed from other budgets, and the Rector is convinced sufficient funds have been provided to assure adequate development.

G. Project Agreement

At the close of the report period, the Ataturk University Rector and the GOT approved and signed the A.I.D. Project Agreement for the University of Nebraska Contract Program operations for U.S. Fiscal Year 1965. It is anticipated A.I.D. will sign the document in the near future and thus allocate the funds to cover operations through June 30, 1965. The proposed staffing pattern for Fiscal Years 1964 and 1965 is as follows:

<u>Position</u>	<u>FY 1964</u>	<u>FY 1965</u>
Chief Advisor	X	X
Botany Professor	X	X
Chemistry Professor	X	X
Economics Professor	X	X
Agr. Economics Professor	X	X
Agr. Engineering Professor	X	X
Agr. Extension Professor	X	X
Plant Science Professor	X	X
Soil Science Professor	X	X
Library Science Professor	X	
Secretary	X	X
Admin. Secretary (Ankara)	X	X

The Project Agreement is in the amount of \$314,000. It is anticipated about \$675,000 will be available to cover the two years operation from July 1, 1963 to June 30, 1965.

REPORT

By

Dr. Evelyn Morrow, Home Economist

This report covers the work and activities for the period October 1, 1962 through March 31, 1963.

Current Situation - Home Economics Department

The first Home Economics classes for the Home Economics students were opened the week of November 5th. It is customary at Ankara University for all students to enroll in only science and general required courses the first two years and then to take courses in their major field the last two years. We feel fortunate that nine hours of Home Economics was granted in our curriculum for the second year.

We now have thirteen Home Economic sophomores (started with ten but have had two transfers from Faculty of Veterinary Science and one from Medical Faculty). Dr. Erkut teaches the class in Basic Nutrition, Dr. Erkut and Prof. Morrow share responsibilities in the course in Family Health, and Dr. Kundak and Prof. Morrow share the responsibilities in Clothing and Textiles. Our biggest problem is the lack of adequate laboratory space for the Nutrition class. We have been able to make arrangements for an adequate clothing laboratory. All our lecture classrooms are adequate this semester.

Considerable readjustment in our teaching and general program was necessitated because of the illness of Dr. Kundak during part of November and most of December.

Prof. Celal Tariman was elected Dean of the Agricultural Faculty in November. It is anticipated that Home Economics will receive his full support in the further development of Home Economics because of his expressed interest in and appreciation of Home Economics.

Entrance examinations to the Faculty of Agriculture were held on October 3. Twenty-five students were assigned to Home Economics. These girls are now freshmen and are taking the required science courses. We now have a total of thirty-eight girls enrolled in Home Economics.

The Home Economics classes are now in their second semester. The results of the final examinations at the end of the winter semester were most gratifying. We are fortunate in having as our first Home Economics students a group that are above average scholastically and in general appearance.

It really appears for the first time that Home Economics is on the upward trail. Faculty members (that is, the large majority) have finally accepted Home Economics as being of academic respectability. This attitude has been reflected

in many ways, especially in the willingness of four department chairmen to plan special courses adapted to the needs of the Home Economics students.

The Home Economics curriculum was printed and circulated to all faculties of the University. A brochure setting forth objectives, depicting the areas of Home Economics, and the types of work available after graduation, is being prepared for circulation by the Home Economics staff. The need for such a publication was expressed very forcibly by the freshmen students. At Ankara University the freshmen do not have any formal direct contact with Home Economics staff as their schedule contains only Science courses. We have been trying to initiate a Seminar course for freshmen in Home Economics but so far, we have been unable to get this request passed the Faculty. Therefore, our only contact is through informal meetings which we try to hold twice a semester.

Several conferences have been held the past three months in regard to the future development of the Home Economics Department at Ankara University. As the Home Economics specialist sees it, there are two major problems (many others of lesser importance), namely, (1) that of not having a permanent chairman whose full time is devoted to the development of Home Economics at this critical period and (2) the lack of funds to provide additional assistants to have in training to meet the needs of the expanding program.

The Nebraska/Ankara University contract expires June 30, 1963. If the Faculty takes immediate steps to solve the above-stated problems, it would seem to me to be highly desirable to extend the contract to include the services of a Home Economics specialist for two years more. This would see the first Home Economics students through graduation, would give time for guidance and assistance to a "permanent" chairman, time for the establishment of laboratories and classrooms in the new Home Economics building and time for the training of at least four more assistants (by 1965).

Home Economics Activities

Class Work

Considerable time was spent in October outlining the Clothing and Textile course and in working with Dr. Erkut to outline Family Health course and Basic Nutrition course.

Dr. Erkut has written, prepared and given all the lectures in the Basic Nutrition course. Prof. Morrow has visited the classes a few times to evaluate teaching methods and subject matter.

Dr. Erkut and Prof. Morrow have assumed equal responsibilities in preparing, writing and giving the Family Health course. We have had a number of guest speakers from the School of Public Health.

Prof. Morrow assumed major responsibility for the Clothing and Textile course during the illness of Dr. Kundak. Neither Dr. Erkut nor Dr. Kundak have had any special training in the area of clothing. One of the reasons clothing was selected to be included in this year's curriculum was because they wanted me to give the lectures. When I leave the Faculty they will have to find an outside person to teach clothing until someone is trained.

Time was spent with the staff from the Farm Mechanics Department in assisting them in setting up a course especially designed for Home Economics. The end result was a series of lectures with very practical laboratory work on equipment and tools of home and field.

Our major problem is laboratory facilities for our classes. The earlier promise of the contractors to have three rooms ready for occupancy was never realized. We have received excellent cooperation from the Milk Products Department. They have even moved some of their classes to other buildings so that we might hold all our classes in their lecture room.

The three classes, Foods and Nutrition, Family Health, and Clothing and Textiles, are being continued the second semester for sophomore Home Economics students.

The results of the final examinations given in February were most gratifying. Our efforts to instill in the students the need to solve problems and use reasoning instead of memorizing lecture notes, are bearing fruit. We had no Turkish books for any of the courses offered so encouraged the students to use their own initiative and resourcefulness in preparing assignments and the solving of given problems in different areas of Home Economics. It is beginning to work!

The Dairy classroom is turned into a very usable clothing laboratory every Wednesday afternoon--complete with sewing machines, cutting tables, ironing board and iron, etc. Surprising how workable a laboratory one can create if necessary.

The first construction project in Clothing was the making of a laboratory uniform. How simple a project this is in the United States, but not so here! First, there are no paper patterns so a model had to be selected and a basic pattern drafted, then each student drafted her own pattern. (All these procedures show why things move so slowly). Only two of the thirteen girls had ever used a sewing machine, so the most basic training had to be given such as how to treadle the machine and how to thread it. It brought to mind the first Clothing project meetings for our early beginners in 4-H Club work.

However, after several weeks of intensive work and grief, thirteen very tailored and neat uniforms were completed. Everyone is very proud of this first achievement.

The second project to be started April 3 is to be a cotton dress. This project should move faster. The true enthusiasm of the students and their willingness to learn helps to bolster the morale of the Home Economics specialist.

The Family Health class has the first Turkish textbooks to be used. The textbooks on "First Aid" were donated to the Home Economics Department by CARE and the Red Crescent (Red Cross). The English First Aid book has been translated into Turkish. It is unbelievable that help must be given on how to use a textbook to University sophomores but it is true.

CARE also presented medical and first aid kits to be used in the laboratory. The Red Crescent wants to present certificates in First Aid to all the Home Economics students who make an average or above average grade in Family Health. This would permit the girls to serve as aides in the Turkish hospitals.

Special Courses Prepared -- The Home Economist worked with the chairmen of the Departments of Agricultural Engineering, Industrial Crops (tea, cotton, etc.), Farm Mechanics (household equipment), and Landscaping to draft course outlines that would be especially adapted to the needs of Home Economists. This cooperation is welcomed and will do much to strengthen the development of our department.

Tours and Seminars

Two tours were conducted this period for the students. The Food and Nutrition class visited the Milk Factory at Orman Ciftlik and observed the pasteurization of milk, making of yogurt, butter, and ice cream. The students were very much surprised when the director addressed them in a short talk and emphasized the importance of Home Economics and congratulated them on entering such a needed profession. Dr. Erkut conducted this tour.

The second tour was to the Home Economics Perfection School under the Ministry of Education. The Clothing and Textiles students had an opportunity to observe the drafting of patterns, the cutting of garments, the actual construction and the finished garments. We were told that this is a pilot study to construct dresses to put on the market in Ready-to-Wear Shops. The students questioned (rightly so) whether the styles and models selected are suitable for the clients for whom they are making the clothes. The students also had a chance to observe the regular work of the Perfection School which includes Turkish embroidery and other forms of handicraft.

Chemistry Seminar

Four of the Home Economics girls were selected to present a "Seminar" (really a panel presentation) on "Use of Phosphorus, Calcium, and Sodium" from the second year chemistry class. The girls gave an excellent presentation and illustrated it with well-prepared posters. The girls had poise, good diction and were surprisingly forceful in delivering their talk.

This was a very fine piece of publicity for our Home Economics Department.

Special Meetings with Freshmen

A committee of girls came to the office and asked for a meeting to discuss the Home Economics program. This meeting was arranged and proved to be very worthwhile as many valuable suggestions were given and important questions were raised by the girls. As a result of this meeting, the Home Economics staff has started to prepare the Home Economics brochure.

A tea for all Home Economics students was held at the home of Professor Morrow on Saturday, January 26, 1963, for the purpose of getting better acquainted with the students and to answer further questions the girls had. This also gave the freshmen girls an opportunity to meet our sophomore girls.

Research Studies

Dr. Kundak has collected data from 40 families in 4 villages near Ankara. This data will be used in addition to data collected in 8 villages in Kizilcahamam area. The Ankara area has had a Home Ec. Extension program while the Kizilcahamam area has not.

Dr. Erkut returned to Mucur to gain additional information on daily diets and actual food consumption of village families. Dr. Erkut weighed the main food items to be consumed for one day and estimated the amount of the minor food staples used. She also collected the actual menus for the days plus a close observation of methods used in preparation. This added data will greatly strengthen her research project.

Birsen Okan Goksu, assistant from Ataturk University now working on her doctorate, came to Ankara University October 1 and remained until December 17. During this time, she worked on her research project on Nutritional and Health Status of Primary School Children. Her data was reviewed, related research and literature related to subject was read, and the general outline for research report was drafted. Several special assignments on background material in health and nutrition were necessary as Birsen has not had any formal Home Economics training. Assistant Goksu also attended the three Home Economics classes that are being held for Home Economics students.

Neriman Gorgunay, assistant at Ataturk University now working on her doctorate in Clothing, came to Ankara University on November 1 and will remain until January 31. The same general pattern as that used to assist Assistant Goksu was followed. However, Assistant Gorgunay is encountering difficulty in finding any research that has even been conducted in her field - making it strictly an original research. Miss Gorgunay has attended the classes also and in a few lectures acted as interpreter in the Clothing class. She had some Home Economics training while in the States and finds it a bit easier to adapt and relate subject matter.

Both assistants lack training in statistical methods that must be used to interpret their data. It was suggested that they take the course in statistics offered at Ataturk University and gain individual help when needed. Time did not permit Prof. Morrow to give them individual help in this area and, furthermore, this was an area that they could gain help from their own staff. As it was, time was too limited to give them the necessary background information in Home Economics. Another working period will be set up for the first of June in order to check analysis of data.

Before Miss Gorgunay returned to Ataturk University on February 2nd, guidance was given her in the compilation of a list of basic clothing and textile books as well as a few general over-all Home Economics books.

Dr. Suat Kundak and Dr. Ayse Erkut are tabulating and coding the data collected for their docent theses and doing the literature review. It is hoped that during the summer months they can complete the major part of their theses. The theses must be completed by March 1964.

The writer worked with Docent Dr. Rezan Sahinkaya on English summaries of three minor projects which she has completed and was going to publish.

The National Soybean Council has asked the Home Economics Department to assist in setting up some simple research projects on the "Use of Soya Oil in the Preparation of Turkish Foods." This assignment will be worked out with the sophomore students.

Staff Meetings

Regular staff meetings have been held during the past few months regarding current problems and situations, planning of summer semester schedules, and the sharing of responsibilities, planning essential equipment and supplies to purchase with the 1962 Home Economics Department and planning necessary and priority furnishings for the Home Economics building.

Also, regular weekly Professors' Council Meetings have been attended. The writer sometimes questions the need for the American specialist to attend these meetings but it seems the advisable thing to do. It is easier to understand why things happen as they do when one sees the procedures of these meetings.

Status of Home Economics Building

After an unnecessary delay of more than four months, the funds for the Home Economics building were released the first week in November. The building committee met on November 15 to iron out some of the problems created by construction stoppage.

The outcome of the meeting was that construction of the building would be resumed on April 1 with the promise that it will be completed by June 15, 1963. It was necessary to obtain an extra 500,000 TL to complete the building. The Faculty of Agriculture has included this item in its 1963 budget and it is hoped that the Ministry of Finance will see fit to allot this extra amount to complete the building.

The best word is that work has begun on the construction of the Home Economics building once more. It is sincerely hoped that this time work will be completed as promised. A small crew of men started work March 18 and a full crew will start April 1. All the metal window frames and the greater part of the electrical and sanitary systems were completed by this time.

The Dean has requested that we make out a priority list of furniture such as tables, chairs, cabinets, cupboards and other laboratory and classroom furniture needed. The carpentry shop will start work at once on these articles. Because of the most limited budget for furniture, the carpentry shop will make most of it thus enabling us to have a great deal more than if we had to buy on the open market.

Dr. Kundak and Dr. Erkut have been drafting and completing plans for laboratory equipment, such as work counters, cabinets and storage rooms.

Six thousand Turkish liras were used to purchase equipment for the Foods and Nutrition, Child Care Center, Home Management, and Health laboratories. One of the most valuable items was a height-weight scale in kilos and centimeters.

The first order of laboratory supplies ordered through the University of Nebraska was unpacked. One begins to feel at long last the reality of having a laboratory with workable equipment by which Home Economics can be taught.

Equipment and Furnishings

The equipment and supplies ordered from the States are arriving but unfortunately we are not able to put them into immediate use. All will have to be stored until the building is ready as there is no available space to set up additional laboratories.

CARE provided the Home Economics Department with eight Singer sewing machines (5 treadle and 3 hand). These are being used in our temporary clothing laboratory. CARE also provided fourteen sewing kits. The pinking shears, cutting shears and small scissors will remain a part of the department's equipment but the minor items will be used by present students.

The department was also fortunate in receiving fifteen copies of eight different bulletins and books that have been translated into Turkish. The first aid book will be of special help in the Family Health course.

Field Trip

Dr. Suat Kundak, Dr. Elaine Smith of the American Embassy and AID, and Prof. Morrow went to Bursa, Gemlik and Istanbul October 16-20, 1962. The purposes of the trip were to visit local factories producing products for the home and to obtain first hand information for course lectures. The main places visited were Merinos Wool Factory, two towel factories, Ispek-Is (Silk Factory), three knife factories, Gemolik Rayon Factory, Pasa Bahce Glass Factory, Dora Plastic Floor Coverings and Oilcloth Company, Kula Rug Outlet Store, Arcelik Factory (refrigerator, stoves, washing machines, etc.), and the Eozacibase Ceramics Factory.

At each place, Dr. Kundak and Prof. Morrow attempted to give the staff a general picture of the Home Economics program and our need for Turkish equipment. The Arcelik Company presented the Home Economics Department with one 10 cu. ft. refrigerator, a washing machine, space heater and hot water heater. The Gemlik Rayon Factory prepared a special teaching kit on the processes of making rayon. The trip was most productive in that we gained valuable information and the fine cooperation and support from local factories.

Village Visits

In January, two visits were made to Ogulbey and Balikpinar villages to observe recommended changes in laundry and bread baking. Unfortunately, little improvement has been made except that hot water is now being used to wash the clothes. Imagine doing your laundry at an outside water fountain when the temperature is at 20° F. Thus, the use of hot water is one step forward.

On this trip the Home Economist was accompanied by Home Extension workers from Michigan interested in learning something about living conditions in Turkey. This trip gave a fairly good glimpse into home conditions as one of the villages is about average for the Anatolian Plains and the other is above average.

On March 29, the Home Economist accompanied Dr. Fethi Altuntug, Director of Mother-Child Health, Ministry of Health, Dr. M. Erenus, Ankara Hospital, Dr. Cahit Demirbas, Director of Health for Turkey, and Dr. Celal Cansunar, Director of Mother-Care Health for Ankara, to the city of Ayas to plan a Mother-Child Care Program.

Dr. Erenus has equipped what he termed a first-aid kit for baby's birth. The kit contains very essential and simple supplies but it is a wonderful help compared to what they now have -- nothing!

Muhtars from the 22 villages surrounding Ayas (or all villages in Ayas County) attended the meeting. Plans were made for an educational program to be put into effect in each village. The program will be planned and executed jointly by the Home Economics staff, the Ministry of Health, and obstetricians from Ankara Hospital. The first meeting in the villages is set for April 15.

One "birth kit" was given each Muhtar and for this they paid 10 TL. First, all the women in the village will be given information regarding basic facts on cleanliness, etc., during birth and post-natal care of mother. Later it is hoped that special training can be given midwives. At present, there are only three untrained midwives to service 3500 families in Ayas.

It is interesting to note that the Turkish person taking the lead in this program has had his training in U.S. hospitals and in addition to his own practice, works at our American hospital in the afternoons.

Other Activities

Home Economics Activities

1. Considerable time was spent in adapting and converting height-weight tables to be used in Turkey for pre-school, school and university students.
2. A start has been made to list research done in Turkey in the area of Food and Nutrition and Clothing and Textiles. After checking many of the works - "research" is a misnomer for many of the articles published.
3. An attempt has been made to formulate definitions of some of the more commonly used Home Economics terms in Turkish. Many of the terms used in English are very difficult to translate into meaningful terms in Turkish - homemaking and housing are two examples.
4. A complete inventory of surplus materials, A.I.D. supplies and equipment was made in cooperation with representatives from the AID End Use Branch.
5. Considerable time was spent with the home economics staff in establishing a budget for 1963-64.
6. Fulfilled a request from Ataturk University to compile a list of reference books in the field of Foods and Nutrition, Clothing and Textiles, and general home economics.
7. Selected a list of 25 current home economics books to add to our present library. These books will supplement or fill the gaps of our present library. A few of the books were ordered with the hope that they can be adapted and translated into Turkish for textbooks.

8. Worked with Docent Sahinkaya on some articles in Family Relations that she wanted to publish.

General Activities

1. Two conferences with Brian Beeley and R. Barry Proud, O.E.C.D. State Planning Board in regard to home economics program in Turkey.
2. Conferred with Home Economics staff from the newly organized Women's Vocational Teacher Training School on home economics curriculum, textbooks, illustrative materials and bulletins.
3. Assisted Miss L. Maude Smith and interpreter to select Home Economics books for Home Economics Extension Training School.
4. Conferred with Mrs. T. Fertas (wife of Brazilian Ambassador) and Mrs. R. Schmidt (Brazil) on Home Economics in Turkey, Brazil and U.S.A.
5. Attended a Seminar on "Psychology of Clothing" arranged by Industrial Crops students.
6. Worked with the Food Technology Department in judging bread which was made with varying percentages of soya flour.
7. Conferred with staff from Soybean Council on baking temperatures and general factors in carrying out experiments with soya flour and soya oil.
8. Cooperated with three high school students in setting up some mice feeding experiments in nutrition.
9. Held two conferences with director of American Library on recommendations for books and magazines in home economics for library use.
10. The Home Economics staff toured the new school for the training of midwives. This school was established with help from WHO, UNICEF and NATO. We could not find out where or how the people were trained that are operating the school. Students (14 to 18 years old) are brought in from all areas of Turkey. At present they have 65 students. It appears that these girls are extremely young to be trained for this job.
11. Assisted the Soil Planning Agricultural Director, Ahmet Baykurt, with the selection of handicraft material for a new program in this department. This organization is expending large sums of money to establish handicraft centers in several districts in Turkey. It is a bit difficult to see the relationship of this program to the so-called purpose of the over-all organization.
12. Conferred with Gunel Ataisik who recently returned to Turkey from Nebraska University. An assistantship was set up for her in the Home Economics Department but she has not accepted. Middle East University has offered her a much higher salary to teach English.

13. An enjoyable tour was made with the members of the International Radio Isotope Seminar to Eskisehir, Bursa, Izmir and Denizli. Fifteen different countries were represented. Prof. Morrow was the guest of the Atomic Energy Commission on this trip. The trip was arranged by Professors S. Ozbek and N. Ozbek.
14. It seems that more time than the usual amount has been spent on editing lectures, papers to be presented at international meetings, summaries of research projects, etc.

Special Activities

1. Outlined Home Management courses for Ege University.
2. Conferred with Harvey Rabiner, CARE, regarding nutritional problems in Turkey and the best procedure to use in the distribution of surplus foods coming to Turkey.
3. Conferred with Dr. Kosal, School of Hygiene, on major health problems in Turkey.
4. Conferred with Professor John Steele, Ataturk University, on agricultural engineering program at Ankara University.
5. Special assistance was given on handicrafts for Turkey - Worked out some plans for handicrafts for use in School for the Blind.
6. Reviewed and studied the draft outline of the "5-Year Development Plan of Turkey."
7. Worked with Dr. Erkut on a questionnaire on National Food Situation in Turkey.
8. Conferred with Mrs. Mark Fox and Bayan Derin of Turkish American Women's Association concerning scholarships.
9. Conferred with Dr. Akyol, School of Hygiene, on the common diseases and control and treatment in Turkey.
10. Conferred with Vasfi Hakman, Director of Soybean Council and Mr. Petty, U.S.A. on use of soybean oil and the possibility of using Home Economic students for demonstration work in Ankara.
11. Met with Director of CARE regarding medical and first aid kits.
12. Met with Director of Red Crescent on First Aid materials.
13. Meeting with Dr. Erenus, Ankara Hospital, on educational program for Mother-Child care.
14. Conferred with Nizamettin Ozbek on Home Safety program.

15. Conferred with architect concerning the completion of the Home Economics building.
16. Conferred with contractor on Home Economics building.
17. Conferred with Mr. Weinman on Peace Corps program on orientation course for Home Economics trainees.
18. Met with Agricultural Attache, Gordon Schlubatis, C. Huntington, Dairy Specialist, Washington, D. C. and Vasfi Hakman on Dairy program.

REPORT

By

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Classes began as scheduled on October 8 with about 75 or 80% of the students on hand, and there was less delay in starting classes than the experience of past years would have predicted. Some of the Letters and Science courses did not get underway until some weeks later. One history class did not begin until December 10. But generally classes either began on opening day or within the first week following.

A total of 566 students were admitted of which 274 were first year students. There are 464 students in agriculture and 102 students in Letters and Science.

In November examinations were given to select new teaching assistants in the Faculty of Agriculture for Ataturk University. Very few applied for these assistantships. However, a total of 15 applicants were examined. The majority of them failed to show proficiency in a foreign language. Of the remainder, five made satisfactory ratings in their subject matter examinations to be employed by the university. Three of these were in the field of Agricultural Economics. There was one each accepted in Plant Science and Animal Science.

The Letters and Science Faculty has been without a Dean during the entire time. This has not helped to stabilize and regulate teaching conditions in that Faculty. A special report has been written about the lamentable conditions that prevail in the Faculty of Letters and Science, and plans are developing to re-organize this school and correct the disorganized status.

Pre-registration plans were drawn up during this period to register students for the spring semester prior to the end of the present semester. The student advisor system will also be put into effect, and the students registered by de-

partments. This can not be completely effective since organized departments in Letters and Science do not exist in some instances. Nonetheless, the advisory system and pre-registration will be inaugurated in the Faculty of Agriculture and extended to those courses in the Letters and Sciences faculty which are taught primarily for agricultural students.

An examination committee was appointed by the Rector to arrange for dates and hours for final examinations in the last two weeks of the semester. This was to avoid final examinations being given early in the semester and thus prolonging the mid-winter vacation.

The student morale has seemingly been good during this time and staff-student relations appear congenial as the semester approaches the last four weeks. Class attendance has been better than in the past and there have been no incidences of disturbances or altercations and student strikes as there were a year ago.

The building program on the new campus has made excellent progress during these three months. It was feared all work would stop when bad weather set in, but this has not happened. There was a short delay due to a shortage of funds but more funds were supplied and the work continued. The student dormitory was largely enclosed before the snow came. By the first of December the heat had been turned on and the work continued on the interior. The top four floors will each accommodate 98 students as planned. Some extra students could be housed in the guest rooms and in the basement. Possibly as many as 500 students, no more than that, could be housed there. The chemistry building is also nearing completion, and the entire faculty and student body will hold classes there next semester, beginning March 2, 1963. The work continued on the social science building and the agricultural buildings until well into November. The social science building should be completed by September 1963. The super structure of the agricultural buildings is erected and the roof is on. These two structures along with the greenhouses probably will not be completed before September 1964.

Animal Science Department

Ataturk University

Prof. M. A. Alexander

The following is an outline of the present and the future Animal Science Department in Ataturk University.

I. Curriculum Development

A. Present Courses

Course	Instructor	Students Served
An. Science 1 Fundamentals	Dr. Macit Ozhan Dr. Ferit Ucarci Doc. Dr. Kemal Biyikoglu or who is available.	All Agri. Depts. and elective for any student.
An. Science 2 Fundamental Nutrition	Dr. Ferit Ucarci Doc. Dr. Kemal Biyikoglu Doc. Dr. Turgut Goksu	All Agri. Dept. and elective for any student.
An. Science 51 Anatomy and Physiology	Whoever is available in Dept. of Hygiene	An. Science stu- dents and Gen. Agri. students.
An. Science 103 Poultry Prod.	Dr. Haluk Ipek (may leave soon for Canadian study)	An. Science stu- dents and Gen. Agri. students.
An. Science 104 Sheep, Wool and Goats	Preparing Asst. Ayhan Aksoy who is about ready for the U.S.	An. Science stu- dents, Gen. Agri. and elective.
An. Science 105 Horses and Donkeys	No instructor at present. Dr. Saip Tellioglu taught it one semester but he is in Australia for two years for sheep and wool work.	An. Science stu- dents and Gen. Agri. students.
An. Science 106 Beef Production	Doc. Dr. Kemal Biyikoglu or who is available	An. Science stu- dents and Gen. Agri. students.
An. Science 107 Dairy Cattle and Milk Prod.	Dr. Macit Ozhan	An. Science stu- dents and Gen. Agri. students.

Course	Instructor	Students Served
An. Science 108 Bees and Honey	Preparing Asst. Fuat Bulci	An. Science students and Gen. Agri.
An. Science 110 Dairy Technology	Dr. Ahmet Kurt	An. Science students who specialize in Dairy Tech.
An. Science 112 Dairy Microbiology	Dr. Ahmet Kurt	An. Science students who specialize in Dairy Tech.
An. Science 152 Feeds and Feeding	Doc. Dr. Turgut Goksu	An. Science students Gen. Agri. and elective.
An. Science X Statistics	Doc. Dr. Saban Karatas	All Agri. departments
An. Science 201 Animal Breeding	Doc. Dr. Saban Karatas	An. Science students
An. Science 202 Diseases and Hygiene	Whoever is available in Hygiene Dept.	An. Science students or elective.
An. Science 208 Animal Nutrition	Doc. Dr. Turgut Goksu	An. Science students

Dr. Saip Tellioglu will be in Australia until about October, 1964, or thereabouts.

Dr. Haluk Ipek is planning to go to Canada for poultry work.

If the Arts and Science College is developed in Ataturk University so basic courses in chemistry, physics, bacteriology, zoology, economics, sociology, philosophy, psychology, botany, mathematics, political science, and English are adequate in quality and quantity to serve the whole University of Ataturk, then the Department of Animal Science, with its present staff, will be able to take care of the increase in Animal Science enrollment when the university enrollment increases to 1000 to 1500 students. If this is not done then the Animal Science staff must be increased now and the university will become a trade school which is far from the objectives set out when Ataturk University was founded. Such an alternative would not be doing the best thing for Turkey.

B. Courses to be added in the future to the Animal Science curriculum are:

1. Livestock Judging
2. Wool technology
3. Meat technology

4. Seminar
5. Current Animal Science problems
6. Advanced livestock production
7. Marketing livestock and livestock products
8. Wild life management

More staff members will be needed as the curriculum is expanded. The expansion should be made when the personnel and funds become available for the new positions.

C. The immediate completion of the dairy unit, the dairy technology building, the cattle barn, the sheep barn, the agricultural building on the campus and the construction of a poultry unit will provide very satisfactory facilities for indoor work in Animal Science. In the agricultural building space ought to be provided for offices, feed analysis room and a wool laboratory room.

II. Staff Development

A. Present Staff

Name	Position	Probable higher degree advancement date
Doc. Dr. Turgut Goksu	Nutrition	1967
Doc. Dr. Kemal Biyikoglu	Cattle and General	1967
Doc. Dr. Saban Karatas	Statistics and An. Breeding	1967
Dr. Ferit Ucarci	Nutrition and General	1965
Dr. Macit Ozhan	Cattle and General	1965
Dr. Haluk Ipek	Poultry	1965
Dr. Ahmet Kurt	Dairy Technology	1964
Dr. Saip Tellioglu	Sheep and wool	1966
Asst. Fuat Bulci	Bees and Honey	1964
Asst. Ayhan Aksoy	Nutrition, Extension, General	1964
Asst. Kamuran Dogan	Dairy Technology	1964
Asst. Nezihe Firater	Dairy Technology	1964
Sub-Asst. Erdogan Selcuk	General	1966

B. Additional Staff

An extension Animal Science staff member ought to be added just as soon as it appears the extension program for the university will develop.

C. Participant Training

1. The following have received training in the United States:

Doc. Turgut Goksu, Doc. Kemal Biyikoglu, Doc. Saban Karatas, Dr. Ferit Ucarci, Dr. Macit Ozhan, Dr. Haluk Ipek, Dr. Ahmet Kurt, Asst. Kamuran Dogan, Asst. Nezihe Firater.

2. Doc. Turgut Goksu received training in Germany before going to the states. Dr. Saip Tellioglu is now in Australia.
3. Asst. Ayhan Aksoy ought to be ready for training in the states within 6 months. If he goes for extension work it ought to be for 2 years.

III. American Assistance

At this time it would seem advisable for an American professor to remain in the Animal Science Department until about Dec. 1, 1963, to continue the supervision for completion of the dairy plant, cattle unit, sheep unit and dairy technology building, all under construction now, and to start the poultry unit. Considerable help will have to be given in the proper use of the buildings for which they were designed.

IV. Present Research

A. The present types of research are feeding experiments with calves, yearling cattle, lambs and a breeding experiment with sheep. When the buildings now under construction are completed, fall of 1963, the facilities for practical research will be very good.

B. Research that can be added after the buildings are completed is classified as nutrient requirements for cattle, sheep, and poultry to give the most economical production for a given amount of feed available. This covers all phases in producing a product.

Pasture experiments will be added as seed and money become available.

The annual research in full capacity will require an expenditure of about 500,000 T.L. The bookkeeping system used will influence the money required. If the project gets to keep the sales the budget will be altered.

V. Farm Development

A. About 2,500 acres south of the sheep plant will be used for dry land pasture improvement work with sheep. One thousand acres of land surrounding the cattle units will be used for pasture studies and grass for the dairy. Seed,

money and housing facilities including water and lights for both the human and the livestock has been a deterrent. Considering the many details and intricate problems in starting a university and a research farm, the program has developed in a very satisfactory manner.

B. Close cooperation between departments is essential for the proper utilization of the farm. Crop and soil research of every fundamental character can be useful for producing feed for the livestock. Irrigation research and livestock feeds go together. Pasture for livestock and pasture research work together.

Sometime in the near future it will be necessary to re-define the existing Farm Department. The Farm Department ought to function as a service department to make it possible to execute projects for the various departments. All departments will need land plowed, land cultivated, land prepared for seeding or irrigation, crops harvested, pastures seeded and sprayed, weeds controlled, constructions, maintenance of buildings, fences built and repaired, feed lots cleaned and repaired, roads built and repaired, special short job labor, manure hauled and spread and many other operations. Machinery and equipment to do the job for all departments would be furnished and maintained by the farm department. Each department would pay a service fee.

VI. Extension Work or Activities

The extension work in the field must be conducted by a force delegated to do extension work. The department teaching and research staff cannot do extension work effectively without injuring their teaching and research program. They can cooperate in planning material suitable for the program to be put over in the village.

VII. Physical Plant Requirements

Office space will be needed for the present 13 staff members. A laboratory for feed and analytical work is needed. A poultry plant is needed. Housing for three families at the sheep barn, four families at the cattle unit need housing, and three family houses at the poultry plant to be built. Water and electricity at all the places are needed.

VIII. Equipment Requirements

Manufacturing equipment for the dairy technology building is needed.

Two or more manure spreaders are needed now.

Two portable water tanks are needed.

Two herder camp wagons for pasture season work are needed.

Present barns under construction need to be completed.

Water and lights for all the livestock buildings are needed before they can be used for their designed purposes.

IX. Department Budget

The expenditures for the Animal Science Department for the next year to complete the buildings now under construction, the new poultry plant, the equipment of the dairy technology, the housing for laborers, feed, livestock herd establish-

ment for the dairy, labor, staff salaries and miscellaneous equipment and supplies will be about 1,654,800 T.L.

X. General

The Ataturk University faculty and student body were moved to the new campus during the vacation month of February 1963. Classes were started March 4 in the Chemistry building for all subjects. Faculty and Administrative offices are in the same building. A student strike started March 11 and continued until March 27. The protest was made over certain student regulations about 5 or 6 days after the strike started. Whether the students will receive credit for this semester is still under consideration. A faculty committee is working on a report concerning the strike.

About the 15th of March a strong wind blew down the open sheds of two of the newly constructed livestock buildings. No livestock was lost but considerable shifting and crowding of livestock was necessary to continue some of the experiments.

Docent Dr. Turgut Goksu received a fellowship to go to England for a four-month Nutrition Seminar given by the University of London. The other staff members in Zootekni are teaching nine classes in seven different subjects. In addition to this they are conducting research and looking after the students registered in the Zootekni Department. This year for the first time there was a complete adviser registration of the students. It uncovered many oversights and practices that will need alterations, all well recognized by the assistants for the first time although the needs have been pointed out previous to each registration.

The staff is comfortably located in adequate office space for the first time. The administration has called for suggestions for a new Animal Science building that is claimed to be on the government list for construction this year. In my opinion this is something that can be delayed for some time without slowing down progress. In fact it might speed up progress if the building was not started now but instead finish the buildings now under construction and house Animal Science in them. There is plenty of space for all the departments in the buildings now under construction for the next 15 to 20 years. There is a big need for immediate construction of dormitories and a library. A student union building and sports or physical education center is needed badly. A central heating plant is a must as adequate water, electricity and sanitary disposal system. These must be built and should have been provided before any construction was ever started. There is a very good chance of having an outbreak of some disease or diseases under the present conditions and thinking.

AGRICULTURAL ECONOMICS DEPARTMENT

Ataturk University

Prof. Leo J. Fenske

INTRODUCTION

Majors in Agricultural Economics and Animal Science were established when classes opened in 1958-59. Approximately 80 students were enrolled in Agricultural Economics and 30 in Animal Science. Since then Soils, General Agriculture, and Plant Science majors have been added.

Dr. Ottar Nervik was the first American Professor in Agricultural Economics. He served from October 1959 to about April 1960. Leo J. Fenske came on duty in October 1960 and will continue until June 30, 1965. In the early years assistance was secured from Ankara and Istanbul Universities. These people usually gave concentrated short courses in Economics, which were useful, but not the most desirable because of their brevity. Courses of this nature have been eliminated.

Seventy-six Agricultural Economics students received degrees in July, 1962. They are now employed by various Turkish government agencies and some are in the army. Two of the graduates have recently become assistants in the Agricultural Economics Department at Ataturk University.

I. CURRICULUM DEVELOPMENT

A. Present Courses

The general pattern of the curriculum was developed early in the program, but at least two major revisions have been made since 1958-59.

The present curriculum in Agricultural Economics is listed below:

<u>First Semester</u>	<u>Credits</u>	<u>Second Semester</u>	<u>Credits</u>
Foreign Language 1*	5	Foreign Language 2*	3
Mathematics 1	3	Mathematics 2	2
Chemistry 1	3	Chemistry 2	3
Turkish Composition 1	3	Turkish Composition 2	3
Animal Science 1	3	Animal Science 2	3
		Economics 1	3
	<u>17</u>		<u>17</u>

*English, French or German

<u>Third Semester</u>	<u>Credits</u>	<u>Fourth Semester</u>	<u>Credits</u>
Economics 2	3	Agr. Economics 51	3
Plant Science 1	3	Plant Science 2	3
Botany 1 or Zoology 1	3	Botany 2 or Zoology 2	3
Soils 51	4	Economics 102	3
Agricultural Engineering 1	2	Agricultural Engineering 4	2
Electives	4	Electives	4
	<u>19</u>		<u>18</u>

<u>Fifth Semester</u>	<u>Credits</u>	<u>Sixth Semester</u>	<u>Credits</u>
Agr. Engineering 5	3	Agr. Engineering 51	3
Economics 103	3	Agr. Economics 54	3
Meteorology 1	2	Bacteriology 1	4
Agr. Economics 101	2	Agr. Economics 102	2
Agr. Economics 104	3	Genetics 1	3
Statistics 1	3	Agr. Economics 106	3
Agr. Economics 103	2		
	<u>18</u>		<u>18</u>

<u>Seventh Semester</u>	<u>Credits</u>	<u>Eighth Semester</u>	<u>Credits</u>
Agriculture 101	2	Agric. Economics 201	2
Agric. Economics 202	3	Agr. Economics 105	2
Agr. Economics 204	2	Economics 104	3
Agr. Economics 208	2	Agr. Economics 203	3
Animal Science 110	3	Agr. Economics 301	3
History 51	2	History 52	2
Electives	4	Electives	4
	<u>18</u>		<u>19</u>

Total semester hours 144

In addition to the course work each student is required to do two months of summer practice. The students are assigned to the State Farms and Experiment Stations, including the Ataturk University Research Institute. Here they gain some practical experience in their chosen fields.

In order to better understand the course work given in Agricultural Economics, the course numbers and titles are listed below:

<u>Number</u>	<u>Title</u>	<u>Credits</u>
Agr. Economics 51	Principles of Agricultural Economics	3
Agr. Economics 54	Rural Sociology	3
Agr. Economics 101	Marketing	2
Agr. Economics 102	Cooperatives	2
Agr. Economics 103	Agricultural Law	2
Agr. Economics 104	Farm Management	3
Agr. Economics 105	Farm Credit	2
Agr. Economics 106	Farm Records	3

<u>Number</u>	<u>Title</u>	<u>Credits</u>
Agr. Economics 201	Seminar	2
Agr. Economics 202	Land Economics	3
Agr. Economics 203	Price Analysis	3
Agr. Economics 204	Land Appraisal	2
Agr. Economics 208	Agr. Policy	2
Agr. Economics 301	Research Methods	3
Economics 1	Principles of Economics	3
Economics 2	Principles of Economics	3
Economics 102	Money and Banking	3
Economics 103	Finance and Taxation	3
Economics 104	International Trade	3
Statistics 1 ¹	Introduction to Statistics	3
Agriculture 101 ²	Extension Methods	2

¹Presently given by a docent in Animal Science

²Presently given by the Erzurum Agricultural Director

1962 - 63 Teaching Program

<u>Course</u>	<u>Credit</u>	<u>Instructor</u>	<u>Students Enrolled</u>	<u>Total No.</u>
<u>1st Semester:</u>				
Econ.1 Principles of Economics	3	Asst.Osman Arikan*	Agr.Econ.II(34)SoilsII(34),Plant ScienceII(42) An.Science II(17),An.Sci.III(12)	150
Econ.103 Finance & Taxation	3	Asst.BakiPirimoglu	Agr.Ec.IV(25)SoilsIII(1)	26
Ag.Econ.104 Farm Management	3	Asst.Ergun Kip**	Gen.III(47) SoilsIII(3)	50
Ag.Ec. 204 Land Appraisal	2	Doc.Dr.I. Aksoz	Ag.Econ.IV(25)SoilsIV(32)	57
<u>2nd Semester:</u>				
Econ. 1 Prin. of Economics	3	Asst.O.Arikan, Dr. Palmer	Gen. I(37) Soils I(28) An. Sci.I(46)Ag.Ec.I(31) Plant Science I(35)	177
Econ. 102 Money and Banking	3	Asst.B. Pirimoglu, Dr. Palmer	Agr.Econ.II(34)	34
Econ. 104 International Trade	3	Unassigned*	Ag.Econ.IV(25)	25
Ag.Econ.51 Prin. of Ag. Economics	3	Doc.Dr.I.Aksoz	Agr.Econ.II(34)An.Sci. III(12)SoilsIII(29)	75

Course	Credit	Instructor	Students Enrolled	Total No.
Agr.Econ.54 Rural Socio.	3	Prof.Fenske,Asst. Gulten	Gen.III(47)Agr.Econ.II (34)	81
Agr.Econ.103 Agr. Law	2	Lawyer from city	Agr.Econ.IV(25)	25
Agr.Econ. 201 Seminar	2	Prof.Fenske,Asst. Kip	Agr.Econ.IV(25)	25
Agr.Econ. 203 Price Analysis	3	Prof.Fenske,Asst. Turkbai	Agr.Econ. IV(25)	25

*Lecturer Standing

**Dr. Palmer with Assistant

B. Proposed Course Changes

As the department staff develops and enrollment grows, several course changes will be made. Marketing, Farm Credit and Agricultural Policy are now 2-credit courses. It is proposed that the credit hours be raised to three by the 1963-64 term. The above courses are primarily for undergraduate majors in Agricultural Economics.

New Courses that will be added when staff develops are as follows:

Production Economics
Economic Development
Advanced Farm Management

The new courses will be mainly for graduate students. No time-table has been set for these additions. It depends upon staff additions and training, but they should come by the 1965-66 school year.

C. Classrooms and Equipment

It is expected that classroom space will not be a problem once the new buildings are completed. These needs, office needs and equipment needs are discussed in a later section of this report.

D. Class Instruction

The first semester of the 1962-63 school year ended on February second. The department offered four courses as follows: Principles of Economics, Finance and Taxation, Farm Management and Land Appraisal.

The second semester commenced on March 4. The department scheduled the following courses: Principles of Agricultural Economics, Price Analysis, Agricultural Law, Rural Sociology and a Seminar for fourth-year students. Dr. Edgar Palmer arrived from Nebraska to take over the courses in general economics, which, prior to this time, were handled by the professor in Agricultural Economics. Needless to say this is a good arrangement and more can be accomplished in both areas.

Unfortunately the students began to boycott classes on March 11, which continued until March 26. This demonstrates the need for printed bulletin containing all rules and regulations of the University, as well as some revisions of present regulations. It also calls for a more thorough orientation of the students on the over-all objectives of a university and a university education.

II. Staff Development

A. Present Staff (Agricultural Economics)

Prof. Leo J. Fenske, Department Head. Responsibilities include over-all development of the department, staff development and training, supervising of teaching and research work, and assisting in the broader phase of University development. Second tour of duty ends June 30, 1965.

Docent Dr. Ibrahim Aksoz. Recently elected to docentship on the University Kadro. Teaching responsibilities include courses in Farm Management, Farm Records, Land Appraisal and Policy. Aksoz has sufficient training to handle almost any course assigned to him. He has received three and one-half years' training at the University of Nebraska. He should advance to a professorship in 5 or 6 years, possibly the earliest date being 1967.

Dr. Asst. Orhan Turkdogan. Received his Doctor's degree in Sociology in June, 1962. Teaching responsibilities fall in the area of Sociology and Rural Sociology. He has carried on many surveys in the villages surrounding Erzurum. He should advance to a docentship in four or five years with the earliest date about 1966.

Asst. Ergun Kip. Teaching responsibilities include courses in Farm Management and Cooperatives. He is presently working on his doctor's problem, "An Economic Study of Sugar Beet Farms in Erzurum and Erzincan." He should receive his doctor's degree in July, 1963.

Asst. Kutlu Zoral. Zoral taught a course in Marketing for one semester, before leaving for the states as a participant. He will return to Ataturk University for the school year 1964-65, and will assume teaching and research duties in Marketing. He should attain a doctor's degree by the end of 1965.

Asst. Turgut Hatunoglu. Hatunoglu taught a course in Land Economics for one semester before leaving for the states as a participant. He is scheduled to return to Ataturk University for the school year 1964-65. He will assume teaching and research duties in Land Economics. He should receive a doctor's degree by the end of 1965.

Probationary Assistants Aydin Turkbak, Sefkati Gulten and Demir Aslan.

These three men were successful in the recent Assistants' examinations, and will be appointed as Assistants effective January 1, 1963. They will have some teaching duties under my direct supervision, and they will receive training in research work and statistical methods. They must com-

plete one year probationary period, then they begin work on their doctor's degrees. At best it will be 1966 or 1967 before they complete any degrees. If possible, some of these men will be sent to the states for training.

(Economics)

Asst. Osman Arikan. Teaching responsibilities involve the first course in Economics given to all Agricultural students. Arikan has received training in the states. He should advance to a doctorate position by the end of 1963 or early 1964.

Asst. Abdulbaki Pirimoglu. Teaching responsibilities include Money and Banking and Finance courses. He will begin work on a doctor's degree problem in Agricultural Credit, unless selected as a participant in the near future. He should receive his doctorate by mid-1964.

Asst. Talat Gullap. Gullap is now in Nebraska studying Economics. He will return in July, and be ready for the 1963-64 school year. It will take him about two years to complete his doctor's degree making the time sometime in 1965. He will teach in the Economics field.

The future development of Economics (not Agricultural Economics) will be in the hands of Dr. Palmer. Up to now both Agricultural Economics and Economics have been under my direction.

B. Additional Staff

Additions to the staff will come by adding assistants. Insofar as known there are no available doctor assistants or docents from the other Turkish Universities. This method of staff development is slow, but the young assistants accepted can be trained in Western-type University ways.

About two assistants per year will be added to the three just taken on. At least one of these will be in Rural Sociology.

C. Participant Training
(completed training in the United States)

Ibrahim Aksoz - Agricultural Economics, $3\frac{1}{2}$ years at University of Nebraska.

Osman Arikan - General Economics, $2\frac{1}{2}$ years at University of Nebraska.

Talat Gullap - General Economics, will complete $2\frac{1}{2}$ years at University of Nebraska on July 1, 1963.

Orhan Turkdogan - Rural Sociology, began training at the University of Missouri in September, 1962. He is scheduled for a two-year program.

Kutlu Zoral - Agricultural Economics, began training at Montana State College in March, 1962. He will specialize in Marketing. Two years are scheduled for him.

Turgut Hatunoglu - Agricultural Economics, began training at Montana State College in March 1962, for a two-year period. He will specialize in Land Economics.

(Future trainees - next three years)

Ergun Kip - Agricultural Economics. We propose to send him to the states in the fall of 1963 for training in Farm Management and Cooperatives. He should go for about two years.

Abdulbaki Pirimoglu - General Economics. We propose to send him to the states about January 1, 1964 or by September, 1964, at the latest. He should go for one and one-half to two years.

The other future trainees cannot be named as yet. They will come from the newly appointed assistants if these men prove out in a satisfactory manner. One man each is proposed for the following fields: Price Analysis, Statistics, Rural Sociology and Land Economics. All should go by September, 1965.

(Other foreign training)

None of the present Turkish staff members has received training in other foreign countries outside of the United States. In the development of men for their professorship this might be desirable. Docent Aksoz for example could profit by a year of study in Germany to perfect his second foreign language (German) and to broaden his experience. This training should be at the expense of Ataturk University and not the United States government. No other person is advanced enough to be considered for this type of training.

III. American Assistance

A full-time American Professor should be continued in the area of Agricultural Economics until the program ends in 1967. The man selected could handle the Agricultural Economics and Economics courses much the same as it has been up to now. Dr. Palmer will be here for the next two years to handle courses in general economics.

The main reason for suggesting that the position be continued is because many young staff members need assistance in advancing to higher degrees. Only one man has a docent standing as of now, and only one man has a doctor's degree. There is much work to be done along the line of staff development.

In addition there is considerable work yet to be done in departmental organization, and some curriculum changes are necessary. The research program must be more firmly established. For those reasons a man trained in Agricultural Economics should be retained until 1967.

IV. Research Program

A. The Department of Agricultural Economics has two research projects approved by the Research Institute and two others proposed.

Project 1 is an analysis of the utilization of power and equipment on farms in Northeast Turkey. Data were gathered on 75 farms in the summer of 1961, including information on tractor and workstock use and costs, input-output data on crops, and the effects of mechanization on farm organization. Analysis will be completed this winter.

Project 2 is a study of sugar beet production on farms in Erzurum and Erzincan provinces. Ergun Kip is the project leader, and will use this data in his doctor's thesis. Data were gathered on 108 farms in the summer of 1962, and the analysis is now in progress.

Project 3 is a sociological study of the village of Ilica. It is, however, dormant because Orhan Turkdogan, the leader, is now studying Rural Sociology in the United States.

Project 4 will be a study of "Economic Factors affecting the Livestock Industry in Erzurum Province." Osman Arikan will be in charge of this project. He has completed his survey form, and will start field work as soon as weather permits.

B. General types of research to be added.

Ibrahim Aksoz has submitted a study dealing with farm accounting systems used on farms in Turkey.

Other projects under consideration are:

- (1) A study of the Agricultural credit cooperatives in the area and how farmers use credit granted.
- (2) A study of systems of land tenure in Eastern Turkey.
- (3) An economic study of alfalfa production in Eastern Turkey.
- (4) An economic study of recommended crop rotations for this area.
- (5) Economics of livestock marketing in Eastern Turkey.
- (6) Land reform studies.
- (7) Several other projects are being discussed, one a small area study in a mountain county.

In general most of the research projects during these first years will be in connection with Doctor's problems. Much of the work will be at the village level in order to supply basic data both for teaching University classes and for advising farmers.

Projects will be added as quickly as possible. Three should be added during 1963, thus making a total of five active projects. Each project requires about 10,000 TL per year for field work operation.

V. Farm Development

The Agricultural Economics Department does not need any of the University farm land assigned to it. Efficiency studies may be made of crop and livestock enterprises under the existing systems of management. Two members of the department are now on the farm committee.

Ataturk University has farm lands at Erzurum and Elazig. The Erzurum farm should be given over to soils, crops and livestock research. For example, all of the animals should be under the direct charge of the Animal Science Department head. Research data can be gathered on all the animals, and at the same time the total monetary returns should be no less than under the present system.

The land should be assigned to the Soils, Plant and Animal Science Departments for research purposes. The commercial aspects of the farm should be incidental to the over-all research program.

At Elazig the land is scattered at three different locations. To date it has not been effectively used. The tract nearest the sugar factory should be retained for a sub-station primarily for crops research in that area. The other tracts should be disposed of to private land owners, preferably former owners or to other governmental agencies. Commercial farming operations at Elazig should be avoided.

VI. Extension Activities

The University should complete its Extension Department with one man in charge, as with the Research Institute. The extension activities need not all be of an agricultural nature. Great opportunities exist for giving evening courses in foreign languages, art, history, economics, etc., to the townspeople.

In the field of agriculture the Agricultural Economics Department can contribute in the following ways:

- (1) Provide basic farm management data to Ministry of Agriculture and University Extension workers.
- (2) Assist in short courses for field extension workers.
- (3) Conduct farmers' meetings in the villages.
- (4) As the Extension Department grows, one man may be assigned to carry on extension activities in the field of Agricultural Economics.

VII. Physical Plant Requirements

When the Chemistry, Social Science and Agricultural buildings are completed on the new campus, the physical space requirements will be adequately met. Until then, the Department and the University as a whole will be handicapped for lack of space.

Office needs are as fol
Three one-man offi
Four two-men offic
Two four-men offices
One work room

VIII. Equipment Requirements

The greatest needs of the department in the line of equipment are calculators. Three calculating machines, one adding machine, and one wide carriage type-writer would serve the department well during the next three to five years. In addition, filing cabinets, bookcases, a drawing table and drawing equipment, and office furniture will be needed.

IX. Departmental Budget

The budget needs of the department have largely been under the direct supervision of the University authorities. To date, there have been sufficient funds to take care of all needs. All research projects approved by the Research Institute carry an estimate of costs. The Agricultural Economics Department projects have cost between 5,000 TL and 10,000 TL each per year. These funds have been used for per diem and travel for the Turkish staff and for extra enumerators' salaries.

X. Conclusions

Progress has been made in the establishment of the Agricultural Economics Department. The work is by no means complete. There has been a serious lag in the sending of participants in this field. Between 1957 and 1962 no participants in Agricultural Economics were sent to the states. However, three men were sent in 1962. It is also unfortunate that the first participant in Agricultural Economics was allowed to leave the University upon his return. He is now head of Agricultural Economics at Ege University.

During the above mentioned period two men were sent as participants in the field of General Economics. One is now on duty here and the other man will be available next July.

The present staff with the exception of one docent are young and inexperienced. However, some very promising men are now in training in the United States, and some are on duty here available for study abroad. Staff development will remain a major problem for the next few years because of the lag mentioned above.

The courses in General Economics have also been the responsibility of the Professor of Agricultural Economics. At times it has taken almost herculean effort to get the job done. For example, during the 1961-62 school term, thirteen courses were supervised. With Dr. Palmer taking over this area, greater attention may then be given to research and other departmental problems.

Over-all University problems include a greater emphasis on science teaching, and a strengthening of the English teaching program. English courses are especially needed for the assistants who may become participants. The number of participants must be increased to a maximum if qualified people can be secured.

There needs to be greater coordination between the Agricultural Faculty and Science and Letters Faculty. Uniform student regulations should apply to both faculties. Students in both faculties should be encouraged to choose electives in the opposite faculty in order to broaden their education.

The system of registering students and scheduling of classes needs improvement. A committee is working on this problem now, and the advisory system will be installed for next semester. The day of registering by classes as a block is past. Greater attention must be given to the student as an individual.

Ataturk University is favorably located to serve the people of Eastern Turkey. Their needs are great, and these needs must be met by the cooperative effort of all concerned. Ataturk University will greatly influence the social, cultural and economic development of Eastern Turkey in the years to come.

XI. Additional Activities

In addition to the activities reported above, the following were carried on:

A. Class Scheduling for Second Semester

A complete schedule of classes and the day and hour program for the second semester was made out by a committee appointed by the Dean. Members of the committee were Ibrahim Aksoz, chairman; Ali Istar, Macit Ozhan, and Leo Fenske. This required much detailed work. All of the Turkish members of the committee worked very hard and well, and were open to my suggestions.

B. Pre-registration for Second Semester

The Rector requested the American professors to work out a pre-registration system. Each department chairman appointed advisors for his classes. In Agricultural Economics, the following were appointed:

1st year class - Assistant Ergun Kip
2nd year class - Doc. Dr. Ibrahim Aksoz
4th year class - Prof. Leo J. Fenske

I was appointed by Prof. Frutchey as over-all chairman for pre-registration. All students were enrolled for the second semester courses before the first semester ended. This was the first successful pre-registration carried out in Ataturk University

C. Teaching and Course Development Committee

The Dean appointed several committees, one of which was on teaching and course development. About 10 Turkish members are on this committee along with me. Several meetings have been held.

D. Supervision of Research

Some time was devoted to assisting Assistants Kip and Arikan with their research problems. Kip has made good headway on his sugar beet farming study.

E. Assistants Added

The following men were accepted as new assistants in the Agricultural Economics Department:

Aydin Turkbakal
Sefkati Gulden
Demir Arslan

The examination was given on November 26.

F. Student Regulations Committee

The Dean of Agriculture appointed a committee of ten to work on this subject. I am the only American on this committee. Considerable work has been done but the work is unfinished. As stated earlier a new and fresh look should be taken in an effort to avoid the present difficulties.

G. Trip to Ankara and Istanbul

A trip was made to these two cities during February. Many individuals were contacted in Ankara on agricultural economics problems, including Nelson, McClosky, Dunn, Bishop, Baskaya, Bucukoglu, Mulayim, Acil, and people at the Central Statistical office. Dr. Aktan was contacted about Osman Arikan's doctor's problem. In Istanbul contact was made with Prof. Fendekoglu regarding assistance in the teaching of our Rural Sociology course. A doctor assistant will come to Ataturk University to assist with this course this semester.

H. Participant Program

Two men have been proposed for participants in Agricultural Economics and Economics. Ergun Kip from Agricultural Economics may go with the first group, and Abdalbaki Pirimoglu with the second group. I have been responsible for writing up the proposed work programs for all Ataturk University prospective participants.

I. Miscellaneous Events

The move to the new Science Building proved to be very nice. It has allowed for more classroom and office space. I am teaching English to my three new assistants and one other young assistant. The class meets twice weekly.

DEPARTMENT OF CHEMISTRY

Ataturk University

Dr. Bryant Harrell

I arrived in Erzurum on 23 February.

The Department is staffed by two docents and two assistants besides myself. In addition, there are two helpers having little or no academic background. Both of the docents are Army officers. The one, Dr. Ihsan Cataltas, is head of the control laboratory of the Third Army, and this work occupies approximately one-half of his time. In about 1.5 years, Docent Cataltas expects to be ordered by the Army to an Army research center in Ankara. The other docent, Dr. Burhan Pekin, plans to leave this summer to accept a permanent position at Ege University in Izmir. His reasons for leaving are largely personal, involving such considerations as family ties.

One of the assistants, Attila Yildiz, has been nominated as a Participant and may be expected to depart for the U.S.A. next September. The other, Sara Beygu, is a Participant-Alternate and may leave for the U.S.A. next January.

It is thus imperative that the teaching staff be expanded immediately. A misleading advertisement (promising trips to America) by the University last December drew seven replies from Chemists. About half of the respondents might prove acceptable to the University. The replies to the advertisement, written around the first of the year, have not been answered. I now have the letters and will answer them. I am interested in planning a trip in June to the other Turkish universities with the idea of developing interest among their June graduates in Chemistry and in other areas of physical science, in coming to Ataturk University as assistants.

The library holdings in Chemistry need to be expanded and kept up-to-date. A move in this direction has been made with the placement of an order for a complete set of Chemical Abstracts and a complete set of Journal of Chemical Education.

The laboratories, though new and intended for instruction and research in Chemistry, were apparently designed in the absence of any help from chemists. They are inadequate for the job as a result, though it will probably be possible to adapt them to our use in time. Only one teaching laboratory and one research laboratory are presently assigned to the Department. The lectures and laboratories of all divisions of the University are given in the Chemistry Building, there being no other teaching building completed.

There is much equipment for all departments available, part purchased with A.I.D. funds, part with University funds. Until recently there had been no systematic handling of the A.I.D. equipment. Some of this equipment has been damaged as a result of improper unpacking and storage. Most of the distribution of the equipment has been on a "grab" basis.

Professor Winter managed to make some order in the equipment chaos prior to my arrival, and since my arrival I have assisted him in a general inventory of scientific supplies, involving the whole University.

The Rector ordered the inventory. We have obtained the cooperation of the departments in inventorying supplies in their possession, and we have carried out the inventory of the A.I.D. supplies still in general storage (in an apartment-house basement). We have taken this opportunity to further the protection and orderly arrangement of the supplies in storage. This work is nearing completion. Once the exact nature of the supplies on hand has been determined, it will be possible to match them against our needs and proceed to order what is lacking.

It is hoped that, when the proper accounting for and placement of the supplies has been accomplished, it will prove practical to organize an "instruments seminar" for the teaching staff in order that the equipment may be handled and employed properly.

The present offerings in Chemistry are entirely service courses to the Faculty of Agriculture. Courses are not offered to allow a major in Chemistry. A curriculum appropriate for a major in Chemistry should be instituted as soon as is practical. The Department now offers in the fall: general, analytical, and organic chemistry. In the spring: general, physical and biochemistry. In no case is there laboratory work, which is, of course, fundamental to instruction in the sciences.

One of the major aims in the coming months will be to introduce laboratory work in the chemistry courses. The inventory is considered to be a step in this direction.

Attempts are being made or will be made in cooperation with other departments to interest the University in (a) establishing a central storeroom for scientific supplies to serve the departments of Natural Science, (b) obtaining the services of an instruments maintenance-and-repair man, (c) ditto a glassblower, (d) the establishment of yearly budgets in the science departments.

ECONOMICS DEPARTMENT
Ataturk University

Dr. Edgar Z. Palmer

The report period has been a short one for me, since I arrived in Erzurum February 23, and started teaching March 4. I supervise two sections of the Principles of Economics, with approximately 180 students in all, one section being taught by Aydin Turkbal, the other by Demir Oslan. These are new assistants, graduated last summer, I believe. A class in Money and Banking, under Abdalbaki Pirimoglu, and one in International Trade, under Osman Arikan, complete the schedule in Economics this semester. These two have a total of about 60 students. All the students are probably majors in Agriculture, and in the two last mentioned, in Agricultural Economics. I hold a review and planning session with the assistants in each class on Friday afternoons, with Osman Arikan as interpreter.

In the past few days I have completed a plan for (1) instituting courses in Economic Statistics, Introduction to Business and Accounting, (2) establishing a major in Economics and Business, and (3) eventually implementing the major with further courses in Economics and Business. This plan is to be submitted to the Dean of the Science and Literature Faculty, who seems favorably disposed toward the idea.

AGRICULTURAL ENGINEERING DEPARTMENT
Ataturk University

Prof. John C. Steele

General Objectives of the University of Nebraska Program at Ataturk University:

1. To help organize and promote the development of a Land-Grant Type of University at Erzurum.
2. To train people:
 - a. teachers
 - b. research workers
 - c. extension agents and specialists
 - d. administrators
 - e. librarians
 - f. others
3. To advise in immediate teaching methods.
4. To develop outlines and subject matter, especially class material.

The Agricultural Engineering Department operating within the objectives listed above has the following specific objectives:

LONG-TERM

The development of a curriculum in the College of Agriculture that will provide training for professional Agricultural Engineers. For the present and until such time as the University provides strong supporting departments in mathematics, physics, chemistry, geology, mechanics and related subjects, the Department of Agricultural Engineering will not have a major curriculum, but will provide support to the teaching, research, extension, and service programs of the University.

PRESENT

The development of Farm Mechanization courses within the Department which will eventually have five sections, namely:

1. Agricultural Machinery
2. Power
3. Soil and Water
4. Farm and Village Buildings
5. Mechanics, Drawing and Technical Services

I. Curriculum Development

2. Courses now being offered:

1. Agricultural Engineering I - Cultural Technique
1 hour lecture; 2 hours laboratory; 2 hours credit

Required of all Agriculture students

Instr. - Asst. Dr. Ali Ozdengiz

Asst. Hursit Ertugrul

An introductory course that covers: study of the scope, purpose, method, and use of engineering knowledge in scientific agriculture, Engineering techniques used in other branches of agriculture, as Soils, Crops, Animal Science, and the practical use of engineering knowledge for solving problems in agriculture mechanization.

No additional staff members will be required to handle this course within the foreseeable future.

2. Agricultural Engineering 3 - Plane Surveying
1 hour lecture; 2 hours laboratory; 2 hours credit

Instr. - Asst. Nevzat Sisman

Not a required subject for any students. *

This course covers the theory and practice of surveying; the care, use, and adjustment of surveying instruments; measurements of distance, direction and elevation; and systems of recording data.

- * This course was offered for the first time this fall. It is being given for the fourth year Soils students who requested an additional course so as to balance their class work over the year. In future years this course will be given only in the spring semester.

No additional staff members will be required to teach this course unless it should be made a required subject for several of the major curriculums. If the number of students enrolled for this class should reach 100 or more another staff member would be required.

3. Agricultural Engineering 5 - Farm Machinery and Power
2 hours lecture; 2 hours laboratory; 3 hours credit

Required course for all Agricultural Students

Instr. - Asst. Battal Kushan

This course covers: The principles and practices by which agricultural machines evolve; the basic power sources and machinery used in planting, cultivating and harvesting of farm crops, studied from the standpoint of functional requirements, design and testing.

4. Agricultural Engineering 4 - Farm & Village Buildings
2 hours lecture; 2 hours laboratory; 3 hours credit *

Required course for all agricultural students.
Instr. - Asst. Ziya Alkan
Asst. Nevzat Sisman

This covers: Design of farm structures, details of construction; specifications, farmstead water supply and sewage disposal, and farmstead arrangement.

* This course in the past has been a 2 hour course but beginning with the spring semester 1963, it will be given for 3 hours credit.

With increased enrollment another staff member will be required for this course. This will be especially important when and if Mr. Sisman should leave for advanced study.

5. Agricultural Engineering 51 - Irrigation & Drainage
2 hours lecture; 2 hours laboratory; 3 hours credit

Required course for all Agricultural students except those majoring in Animal Husbandry.

Instr. - Asst. Dr. Ali Ozdengiz
Asst. Hursit Ertugrul

This course covers the principles of erosion control, irrigation, and drainage, and their application to farm problems; rainfall, runoff, soil and water relationships as they affect soil management practices.

b. Courses to be added:

1. Agricultural Mechanization (Present curriculum)

- (a) Statics & Strength of Materials - Fall 1963
For Soils Students
- (b) Drafting - - - - - Spring 1964
For all Agricultural students
- (c) Irrigation Structures- - - - - Spring 1964
For Soils, General Ag. and Plant Science Students
- (d) Hydraulics- - - - - Spring 1964
For Soils students
- (e) Farm Metals Shop - - - - - Fall 1965 *
For all Agricultural students
- (f) Farm Woodworking Shop- - - - - Fall 1965 *
For all Agricultural students
- (g) Farm Motors Shop - - - - - Fall 1965 *
For all agricultural students

- (h) Farm Electrification - - - - - Fall 1965 *
For all Agricultural students

* The time schedules for the introduction of these shop courses are based on the assumption that adequate laboratory space will be available in the new University buildings.

2. Agricultural Engineering (Professional Curriculum)

Listed herein is a suggested course of study leading to an Agricultural Engineering Degree, the adoption of which is contingent upon support from the College of Arts and Sciences in the areas of mathematics, physics, chemistry, and related subjects. If such support is not provided the College of Agriculture will be forced to set up facilities for teaching these basic courses. Thus, it appears that it may be 1970 before this curriculum can be incorporated into the Agricultural College.

General Courses: Total of 55 semester hours				55
Chemistry	8 hrs.	Physics	8 hrs.	
Mathematics	16 hrs.	Geology	3 hrs.	
Botany	4 hrs.	Statistics	3 hrs.	
Economics	3 hrs.	Language	6 hrs.	
		Turkish History	4 hrs.	
Agricultural Courses: Total of 16 hours				16
Crops	4 hrs.	Soils	5 hrs.	
Animal Science	4 hrs.	Farm Mgt.	3 hrs.	
Engineering Basic Courses: Total of 35 hours				35
Drawing	3 hrs.	Contracts & Law	3 hrs.	
Surveying	3 hrs.	Descriptive Geom.	3 hrs.	
Theoretical		Thermodynamics	3 hrs.	
Mechanics	10 hrs.	Electrical Eng.	4 hrs.	
Engineering				
Design	6 hrs.			
Agricultural Engineering Courses: Total of 23 hours				23
Soil & Water Eng.		6 hrs.		
Farm Structures & Housing		6 hrs.		
Farm Power & Field Mch.		5 hrs.		
Stationary Equipment & Power Units		3 hrs.		
Special Problems Study		3 hrs.		
Electives: 15 hours				<u>15</u>
Total				<u>144</u>

No attempt is made in this report to project the additional staff members needed to implement the Agricultural Engineering Course of Study.

The present Agricultural Engineering staff is adequate to handle the courses now being given assuming today's enrollment. A sizeable increase in enrollment would make it necessary to have additional staff members. The Agricultural Engineering Department is attempting to limit the number of students per class to 50 or less. The addition of two assistants will make it possible to maintain this position allowing for the absence of two or three members for advanced training.

Two more staff members will be required upon the addition of the Hydraulics, Drafting and Shop courses.

c. Classroom and Laboratory equipment needed:

The Agricultural Engineering Department is woefully lacking in classroom and laboratory equipment needed for the proper teaching of the courses presently being given. A limited number of surveying instruments (4 levels, 4 transits, 4 hand levels) and a generous supply of drafting instruments (120 sets) are the only equipment available. All other equipment that is being used is of a make-shift nature.

The lack of time precludes, at this time, an itemized list of equipment needed for current and future courses. A conservative estimate of the cost of properly equipping these courses is \$15,000.

d. The Agricultural Engineering Department gave three courses during the first semester.

1. Agricultural Engineering (Cultural Technique) which is an introductory course to the field of Agricultural Engineering. This was given in three lecture sections with four lab sections. Lecture and lab sections A and C were handled by Dr. Ali Ozdengiz. Lecture section B and lab sections B and D were taught by Kursit Ertugrul. Nevsat Sisman assisted both these men with the drawing and surveying portions of the course.
2. Agricultural Engineering 3 (Plane Surveying) covers the theory and practice of surveying in which the students were taught the care, use, and adjustment of surveying instruments; the measurement of distance, direction and elevation; and how to record data.

This course was added to the curriculum one month after the beginning of the semester. This was given for the fourth-year Soils students who requested an additional course so as to balance their class work over the year. Nevsat Sisman*, the instructor, in order to cover the material met the class twice as often as normal during the month of November.

*(We were able to have Nevsat promoted to the rank of Lecturer making it possible for him to legally teach.)

3. Agricultural Engineering 5 (Farm Machinery and Power) a required course for all agricultural students, was taught by Assistant Battal Kushan. The course covers the principle and practices by which agricultural machines evolve; the basic power sources and machinery used in planting, cultivating, and harvesting of farm crops, studied from the standpoint of functional requirements, design and testing.

Due to the large number of students (165) this course was divided into two sections. With the addition of another assistant in the Machinery and Power section of our staff, we will be able to have more sections.

- e. The second semester began March 4th in the new Chemistry building on the campus immediately west of the city. The Agricultural Engineering Department is teaching two courses this semester:
 1. Agricultural Engineering 4 (Farm and Village Buildings). This course is also a required course for all agricultural students. It covers the design of farm structures, details of construction, specifications, farmstead water supply and sewage disposal, and farmstead arrangement. Heretofor this has been a two-hour course which made it impossible to cover the material properly. Hence, this semester it is being given for three credits. Dr. Ziya Alkan, assisted by Nevsat Sisman, is teaching this course.
 2. Agricultural Engineering 51 (Irrigation and Drainage). This course is required for all agricultural students except those majoring in Animal Husbandry. It covers the principles of erosion control, irrigation and drainage, and their application to farm problems; rainfall, run-off, soil and water relationships as they affect soil management practices. This course is given in two sections. Dr. Ali Ozdengiz is teaching one section and Dr. Hursit Ertugrul the other.

During the student strike (March 11 through March 26), the above described courses did not meet. Unless the semester is extended, it will be impossible to cover all the outlined material.

II. Staff Development

a. Present Staff

1. Asst. Dr. Ali Ozdengiz - Soil and Water

Dr. Ozdengiz received his Doctor's degree in 1961 from the University of Vienna. He expects to get his Docent's Degree by 1965.

2. Asst. Ziya Alkan - Farm and Village Buildings

Mr. Alkan finished his undergraduate work at the University of Ankara in 1948. From 1957 to 1961 he studied at the University of Nebraska where he received degrees in Agricultural and Civil Engineering. He should receive his Doctor's degree in March 1963.

3. Asst. Hursit Ertugrul - Soil and Water

Mr. Ertugrul completed his undergraduate work at Ankara University in 1954. Hursit studied at the University of Nebraska 1959-61. He plans on obtaining his Doctor's degree in March 1963.

4. Asst. Nevzat Sisman - Farm and Village Buildings

Mr. Sisman graduated from Ankara University in 1958. He is to receive his Doctor's degree in June 1963.

5. Asst. Battal Kushan - Agricultural Machinery

Mr. Kushan completed his undergraduate work at Ankara University in 1958. He has had 2 years of advanced study in Germany and 2 semesters in Istanbul Technical University. He will get his Doctor's degree in June 1963.

6. Asst. Dr. H. Dincer - Agricultural Machinery

Dr. Dincer is presently serving in the Army. He is expected to return to Ataturk University in October 1964. Dr. Dincer studied for two years in Austria where he received a Doctor's degree from the University of Vienna.

8. Asst. Altan Ersayan - Power

Mr. Ersayan is presently serving in the Army. He is expected to return to the staff in July 1963. He spent two years ('59-61) at the University of Nebraska. He received very little training due to his deficiency in English and his irregular class attendance.

b. Additional Staff

1. The Agricultural Engineering Department is planning on adding two Assistants to its staff in the fall of 1963. These must be technically trained. One must be interested in Agricultural Machinery and the other qualified in the field of electricity.
2. Two staff members qualified to teach all kinds of shop work. These should be available by the fall of 1964. One should be a Docent and the other may be an assistant working for advancement. However, it is very doubtful if any people qualified for these positions can be found in Turkey. This may require the recruiting of one or two persons to be sent to the United States for training in this field. Twelve months' training should be adequate.
3. Ultimately the Agricultural Engineering Department needs to have the following staff:

<u>Section</u>	<u>No. Prof.</u>	<u>No. Doc.</u>	<u>No. Asst.</u>	<u>Year</u>
Agriculture Mch.	1	1	2	1968
Power	1		1	1968
Soil & Water	1	1	2	1968
Farm & Village Bldg.	1	1	2	1968
Mechanics, etc.	1	1	3	1968

It is to be expected that most, if not all, Professors and Docents will be obtained from assistants getting their degrees from Ataturk University. Under present conditions it is very doubtful if such staff members can be recruited from other universities.

c. Participant Training

1. Staff members having received training in the U.S.:

- (a) Ziya Alkan - $4\frac{1}{2}$ years - Earned 2 engineering degrees
- (b) Hursit Ertugrul - 2 years - no degree
- (c) Altan Ersayan - 2 years - no degree

2. Staff members having other foreign training

- (a) Dr. Ali Ozdengiz - 2 years Austria - Dr. Degree in '61
- (b) Dr. H. Dincer - 2 years Austria - Dr. Degree in 1962
- (c) Battal Kushan - 2 years Germany - no degree

3. List of staff members to receive training in U.S.

<u>Staff Member</u>	<u>Field</u>	<u>Rank</u>	<u>lgth.Trn.</u>	<u>When Ready</u>
Nevzat Sisman	Field & Village Bldg.	Asst.	2 years	Sept. '63*
Dr. Ali Ozdengiz	Soil & Water	Dr. Asst.	1 year	Sept. '63*
Battal Kushan	Agri. Mach.	Asst.	2 years	Sept. '63*
Idus Kushan	Mach.Drafting, etc.	Asst.	1 year	**
To be recruited	Shop Work		1 year	***

* If dependent upon their progress in learning English.
(The lack of an organized English course for the Assistants is handicapping this portion of our program).

** Mr. Kushan is presently serving in the Army. He is expected to return to the University in January 1964. It is hoped that he can assume the responsibility of teaching drawing, mechanics and other allied courses. Not knowing this man or anything regarding his training and his English, it is difficult to predict when he could be given training in the U.S.

*** It is hoped to recruit a staff member that could go for this training in September 1964. This may mean the selection of an Assistant by January 1964.

4. Two Agricultural Engineering Department assistants completed their theses and successfully passed their examinations for their Doctor's degrees.

Hursit Ertugrul's degree was based on a study of the irrigation qualities of the waters of the Erzurum valley. This included both surface waters and ground waters.

Ziya Alkan received his Doctor's degree from a study made in connection with his work of providing modern housing for the University farm workers. This study was primarily of construction materials and methods that could be used to provide good living quarters at a reasonable cost to village peoples.

III. American Assistance

- a. A full-time American Professor will be required for the duration of the project. The problems of course development and of establishing an Engineering curriculum being somewhat different from those in the Agricultural fields, the services of an engineer are required.

IV. Research Programs

a. Current

1. Erzurum valley water quality study.
2. Materials and methods of construction at low cost, with the maximum of self-help for Farm and Village Housing in Eastern Turkey.
3. Power characteristics of Batteries and Generators for automobiles and Tractors.
4. Operating characteristics of sprinkler irrigation systems for Eastern Turkey conditions.
5. Farm structures in Erzurum Province - Present condition and their improvement.

Projects 1 and 2 are of continuing nature and will require several years to complete.

b. Future Research

1. Research pointed towards the mechanics of modifying the natural environment to gain improved crop production.
2. Farm Power.
3. Mechanics of harvesting, handling and storing crops.

Research in these areas will be initiated as staff, funds, equipment and space become available.

V. Farm Development

- a. It is extremely difficult to determine the amount of farm land needed for research as most projects can be carried out in cooperation with other

departments. Most of the testing and demonstration work can be carried out at the time of routine farm operations. The Agricultural Engineering Department will require approximately 75 hectares of land to carry out the research, testing, and demonstrating that cannot be done cooperatively.

b. Recommendations for the Ataturk farms are listed below:

1. That the size of the farm at Erzurum be reduced to that needed for an adequate experiment station. This should probably be in the area of 500 hectares. An additional 50 hectares could be used as a demonstrational farm.
2. That approximately 40 hectares of the University land at Elazig be used for fruit and vegetable research work.
3. That 40 hectares of the University land lying east of Elazig be used for crops research.
4. That 10 hectares of the same plot of land be used as a demonstrational farm.
5. That the University land lying west of Elazig be assigned to some other governmental agency or resold to the villagers.
6. That complete "Master" maps be prepared of all the University lands so as to facilitate long-time farm planning. These maps should embody the following:
 - (a) Surveyor's map showing boundaries and all essential measurements (fairly large scale).
 - (b) Topographic map
 - (c) Soils map
 - (d) Landmarks: Roads, irrigation wells, laterals, drainage ditches, buildings, field boundaries, tree plantings, etc.
 - (e) General areas: Farm headquarters, forests, seed increase, muck land, etc.
7. That the land surface be graded as soon as possible to facilitate tillage operations as well as irrigation and drainage.
8. That a complete irrigation system be developed and installed. This may involve the construction of several additional wells.
9. That a training program on the operation and maintenance of the farm's tillage machinery be developed.

VI. Extension Activities

- a. The Agricultural Engineering Department is ready and willing to assist the Extension Service in every way possible. The staff can be, with proper planning, made available for demonstrations, meetings for teaching short courses, etc. As research results become available, they will be made available to all Extension workers.

VII. Physical Plant Requirements

- a. At present the Agricultural Engineering Department has no space set aside for its exclusive use. Three assistants are officed in a room with 3 other assistants and one technician. The other two assistants do have the use of a small room in the office building on the farm. The classrooms also serve as laboratories, which limits the amount and kind of laboratory exercises that can be carried out.

The Chairman of the Department is officed in one room with other Department Chairmen. This makes for a great deal of confusion and leads to inefficiency.

- b. Space requirements for the Agricultural Mechanization course:

10 offices	1963
3 classrooms	1963
1 structures laboratory	1963
1 power & Machinery laboratory	1963
1 Hydraulics laboratory	1964
1 soil and water laboratory	1963
1 metals shop	1965
1 wood working shop	1965
1 motors laboratory	1965
1 electrical laboratory	1964

The space that will be required when a professional Agricultural Engineering curriculum is established is not set down here. It appears at this time that it will be 10 years or more before this becomes a reality.

VIII. Equipment needed in near future.

- a. Two windmills for pumping water for livestock
- b. 4 plane tables and telescopic Alidades
- c. 4-- 30 meter tapes (surveying)
- d. 200 plastic siphon tubes ($\frac{1}{2}$ ", 1", $1\frac{1}{4}$ ", 2" dia.)
- e. 1000 feet gated pipe (8" dia.)
- f. 2 Parshall flumes (6", 8")
- g. 10 check dams (plastic and metal)
- h. 44 tensiometers (8-12", 16-18", 16-30", 4-36")

IX. Departmental Budget (1963 - approximate)

a. Salaries	132,000 T.L.
b. Travel and Per Diem	10,000
c. Equipment, Supplies and Materials	50,000
d. Miscellaneous (Labor, Ext. Activities, etc.)	<u>25,000</u>
Total	217,000 T.L.

X. General

Last December the reporter was asked to serve as a consultant to U.S.A.I.D./ Turkey. This was to advise them on an Agricultural Engineering Project for the development of an agricultural engineering instructional program with Ankara and Middle East Technical Universities.

Having been given permission from the Chief Adviser of the Nebraska Group and the Rector of Ataturk University, the reporter spent two different weeks in Ankara on this assignment. The first period, January 7-17, was spent in making a study of the present courses being offered at both Universities in basic sciences, basic engineering, and agricultural biological sciences pertaining to agricultural engineering.

The second period, February 18-21, was spent in consultations with officials of both Universities reviewing the rough draft of the report.

The final report will be completed and presented to A.I.D., Ankara University, Middle East Technical University, and the Turkish Ministry of Agriculture by April 20, 1963.

The reporter was also asked to make a one-day survey of a proposed irrigation project near Adana. This was to be made on the return trip to Erzurum. The purpose was to become acquainted with the overall project for possible future consultation work. However, due to rain all day February 23, and the inability to locate the resident A.I.D. technician, the reporter was unable to carry out this assignment.

LIBRARY SCIENCE REPORT
Ataturk University

Prof. Arthur J. Vennix

This period witnessed both triumphs and disappointments for the Library Advisor. The triumphs are behind us and are well grounded. The disappointments are not insurmountable and should eventually turn into triumphs. Meanwhile, progress is being made in other areas of the broad library program.

I. Curriculum Development

- A. At the present time the Library is not directly involved in the curriculum, except insofar as it serves the people who are teaching courses, the students who are taking these courses, and the people who are doing research.
- B. A course in the use of the Library is being planned to begin with the first semester of the 1963/64 academic year. This course is planned for all first-year students. A one-hour session each week for a single semester should be adequate to give the students the knowledge of library techniques they will need in a self-service library such as the one that is being established at Ataturk University.

The course will cover such basic essentials as library rules and regulations, the use of the card catalog, the Dewey Decimal Classification System, and the use of the most important of the indexes, abstracts, encyclopedias, periodicals, etc.

It is not anticipated that any additional personnel will be required specifically for the purpose of handling this assignment.

- C. No special classroom or laboratory equipment will be needed for this course.

II. Staff Development

The Library staff was inadequate, to say the least, when the Advisor returned to Erzurum some seven months ago. In the course of the period, the staff has been depleted by three persons. One member of the staff, who was being trained to catalog Eski Turkce books, was promoted to the position of General Secretary of the University. The young lady who had been trained to catalog English language books decided that she no longer wanted to work for a living and quit. The young man, on whom the Advisor had been placing high hopes, because of his intelligence and adaptability, announced that he was going to Ankara to work and departed.

A. Present Staff

- 1. Miss Muserref Aysay, the Library Director. Graduate of Ankara University Faculty of Dil ve Tarih-Gografya. Miss Aysay has 16 years of responsible library experience (8 years in the National Library, 6 years in the Ankara Public Library, and approximately 21 months as the Librarian at Ataturk University.)

2. Sureyyah Gumus, Periodicals Librarian. Graduate of the Library Institute at Ankara University (bottom of his class). Approximately 14 months of experience.
3. A woman who does the typing, after a fashion; and two young fellows, both of whom are high school graduates, one of whom "runs" the reading room and the other of whom performs various odd jobs that are slightly above the level of janitorial services.

It is hoped that Miss Aysay will be sent to the States as a Participant for academic training in library science and for some practical training at the University of Nebraska Libraries. The Rector and the Library Advisor have not yet reached complete mutual accord on this matter.

Meanwhile, the Advisor has worked out a complete staffing plan for the Library. Two members of the Faculty Library Committee have tentatively approved the plan, which calls for a total of ten persons, i.e., a Library Director, five librarians with professional training, two clerk typists, and two general assistants. Within the next week or two the Advisor will again consult with the Faculty Library Committee and will then submit the plan to the Rector.

If the Rector approves of the plan, the Advisor will next prepare job descriptions of each of the positions. Recruitment of suitable personnel will be a formidable assignment, but it will be undertaken with the hope that the Library Director and the Advisor will be consulted before selections are made and that appointments will be made on the basis of qualifications rather than on the basis of need for a job or relationship to someone already in the university -- or already out of the university as the case might be.

III. Participant Training

1. None of the present staff members has received Participant Training.
2. None of the present staff members has received other foreign training.
3. Miss Aysay has been suggested as a candidate for Participant Training in the United States, but this suggestion has not yet been approved by the Rector of Ataturk University.

The plan is to have a Participant attend a library school and acquire a Master's degree in librarianship. This would require about 15 months. (In my estimation the University of Denver Graduate School of Librarianship would be most suitable.)

Following this formal educational program should come about a six month on-the-job training period at the University of Nebraska Libraries in Lincoln.

The Participant should be ready to leave for the United States by June 1, 1963.

IV. American Assistance

It appears to me that it will be necessary to provide American assistance until at least 1 July 1964, in order to achieve the principle objectives outlined in the comments at the end of this report. Extension of American assistance beyond this date depends upon our ability to recruit and train some suitable personnel to continue the library operations until such time as the Participant returns from the United States.

V. Research Program

There is no specific research program as such in the Library. However, the Library is naturally involved in all of the research programs in the university because it is the source of research materials.

VI. Physical Plant

Move to new quarters: The largest single achievement of the period witnessed the move of the Library from its very unsuitable quarters in the old building to its spacious, well-lighted, contiguous quarters in the new building. Somewhere along the line, about 20% of the Library's new quarters had been designated for the bindery operations, but the Advisor was able to convince the Rector that the total space originally agreed upon was essential for library operations -- exclusive of bindery operations.

Although the move had been carefully planned ahead of time, sufficient consideration had not been given to the quality of the workmen who would be doing the physical work. The result was a mess which looked as though it would be impossible to straighten out. However, by dint of long hours and full cooperation on the part of the Library staff, everything was shipshape when classes resumed on March 4th.

As of the end of this period the Library does not yet have the new furniture that was to have been supplied before the move was made, nor has the lighting of the total Library area been completed. These matters will probably be achieved in the period immediately ahead.

It has become obvious to the Advisor that the students at Ataturk University do not want adequate lighting. They are so accustomed to studying in darkness that fluorescent lighting bothers them and they are forever turning off the lights. Hence, full completion of the lighting as originally planned will not be pushed by the Advisor.

New Library Building: Hopes for a new library building have been stimulated by the inclusion in the current budget of Ataturk University the sum of T.L. 1,500,000 earmarked for beginning a new library building. The Advisor hopes to have an opportunity to work with the architects and engineers in the design of the building.

The Advisor has a set of the plans, together with descriptive literature and pictures and an inventory of furniture and equipment for the new library being built on the College of Agriculture campus at the University of Nebraska. He hopes

to "sell" the Rector and the architects and engineers on building a similar building on the campus of Ataturk University.

VII. Equipment Requirements

The shelving, tables, chairs and desks that will be needed to equip the temporary quarters on the new campus have already been placed on order. These are being made in the University Carpenter Shop.

Additional equipment needed includes a microfacsimile reader, a book photocopier, a map case, and a few book trucks. These are not available locally and, with the exception of the map case, are not manufactured in Turkey. Preliminary negotiations are already underway with U.S.A.I.D. for the purchase of these items.

All of the equipment currently in use in the Library, together with the new equipment being manufactured or purchased, can be used in the new library building. However, this new library building of 1966/67 will require tremendous amounts of new equipment, principally of metal. Excellent metal desks, chairs and tables are manufactured in Turkey, but I have been unable to find any Turkish manufacturer of metal bookshelving of a quality that I would consider suitable. Therefore, at the appropriate time, I will recommend that one of the good American library equipment manufacturers be given the contract for all metal shelving in the new library building.

The chief equipment of a university library, of course, is books and periodicals. Unusually large budgets must be allocated for this purpose for several years in a new university if a suitable collection is to be built to support a genuine university program of teaching and research.

Book purchases: At the moment, the Advisor is busily engaged in ordering several thousand dollars worth of books through A.I.D. as a result of information recently received to the effect that A.I.D. has money to spend for printed materials. Unfortunately, there is not an individual on the Library staff who is qualified to make book selection on such a broad scale. Having the various departments do the job would result in such a time lag that the funds would no longer be available by the time the selections had been made and the orders were ready for processing.

Along with routine purchases of single titles and subscriptions, a complete backfile of Chemical Abstracts, The Journal of Chemical Education, and the 1953-1957 National Union Catalog cumulation have been ordered.

VIII. Departmental Budget

Through the present fiscal year no specific budget allocation has been set aside for the library. However, the library has been permitted to purchase everything it felt was needed.

This year, however, the Rector has asked that the Library indicate the amount it should have in a Library allocation for the fiscal year 1963/64. The Library has requested T.L. 665,000 from the current fiscal year's operating budget to be used as follows: T.L. 500,000 for books; T.L. 150,000 for periodicals; and T.L. 15,000 for bindery supplies and materials. Library salaries, furniture and equip-

ment are not included in the separate budget for the Library. To date the Advisor has not been told how much of the requested budget has been granted.

IX. Orientation

Having moved into the new quarters, the Library has started a program of orienting students in the use of the Library. Several small classes have been escorted through the Library. It is hoped that all students can be oriented before this semester grows much older. Arrangements for scheduling of orientation groups are being made through the student associations. The program of orientation is being handled by the Library Director, Miss Aysay.

X. Principle Objectives

The principle objectives of the Library Advisor during the two years between July 1, 1962 and July 1, 1964, fall into three major divisions:

- a. Establishing routines and regulations;
 - b. Recruiting staff; and
 - c. Training staff.
- a. Establishing routines and regulations:

This involved such things as developing a set of cataloging rules, suitable for this library and of sufficient simplicity so that the rules can be followed even though the staff has not been formally trained in a library school for such operations; developing regulations governing the borrowing and lending of books and the routines for the implementation of the regulations; establishing criteria for the development of office or departmental libraries as opposed to one central library; developing a system of purchasing books that is not too cumbersome and that can be followed by accounting personnel who have not had adequate technical preparation, and so forth.

Rules and regulations by which the public service end of the Library are to operate were drafted several months ago by the Advisor and approved by the Faculty Library Committee. Although the final draft of these rules and regulations were presented to the Rector nearly two months ago for his signature, they have not yet been returned to the Library Advisor.

b. Recruiting staff

This has proved to be almost impossible because of the physical location of Ataturk University. The few qualified librarians (by virtue of training and/or experience) now in Turkey do not want to come to Erzurum. Until such time as a substantial salary differential can be arranged and additional perquisites can be added, the task of recruiting qualified personnel will continue to be most difficult.

However, contacts have been established with the National Library and with the Library Institute in Ankara and I am hopeful that these contacts, plus some

newspaper advertising in Ankara and Istanbul, will eventually produce some favorable results.

c. Training staff

Thus far this has not been too much of a problem because there has not been much staff to train. However, librarians trained in Turkey or having Turkish library experience must be completely retrained because at Ataturk University we are trying to establish an American type of library in an American type of university. To put it succinctly, the concept of librarianship throughout Europe and the Middle East is quite different from the concept of librarianship in the United States.

This last statement applies particularly to both paragraphs a and c.

To say that a library is "the heart of a university" is to use a tired-out old cliché. But it is, nonetheless, very accurate and quite descriptive.

Until there can be some definite demonstration of the direction in which Ataturk University is going the task of the Library Advisor is a hazardous one. The Library must be developed to serve the needs of the institution. If this is to be an agricultural college, the library should develop accordingly. If there is to be a genuine Faculty of Letters and Science, the Library must develop to serve that Faculty in addition to the Faculty of Agriculture. It also makes a difference whether the Library is developing for 1,000 or 10,000 students, whether for undergraduate or graduate work, whether for teaching or research, or whether for a combination of all of these areas.

XI. General

U.S.B.E. and U.S.D.A.: This Library has long been a member of the United States Book Exchange, but no one at this institution had been aware of such membership. In the present period the Advisor got this matter straightened out and selections have been made from the last several U.S.B.E. exchange lists.

It was during this time, too, that the Library was advised that it had been approved as a repository for United States Department of Agriculture publications. This means that this Library will now receive publications of the Agricultural Experiment Stations and the Agricultural Extension Stations, as well as the U.S.D.A. Routines for handling and processing these materials will be worked out as soon as a representative sampling of the materials has been received.

A.I.D. Library: The Advisor spent about a week in Ankara helping to establish a central headquarters library for A.I.D. Most of his time was spent taking the A.I.D. Librarian to various libraries in Ankara, showing her various methods of setting up and operating libraries, and helping her to develop techniques for cataloging and classifying the A.I.D. collection. It is likely that sometime within the next three months the Advisor will again spend a week or more in Ankara assisting the A.I.D. Librarian further.

XII. Summary

The Library Advisor has a definite program in mind in an area that is reasonably easy to delineate. Some progress is being made in almost all areas of this program. The two most noticeable stumbling blocks fall in the area of personnel, i.e., recruitment of additional staff and the selection of a suitable candidate as a Participant, and some uncertainty as to the kind of institution for which the Library is being developed. There may be some solutions to the personnel problems which the Library Advisor can work out in one way or another. The other major stumbling block must be obviated by administrative officials on a level above the Library Advisor.

PLANT SCIENCE DEPARTMENT Ataturk University

By

Prof. E. J. Wheeler

The Department of Plant Science has the responsibility of developing the subjects of general crops, horticulture and plant protection into the curriculum of the university. A research program is in the process of development. The extension program has developed only to a cooperative endeavor with the agriculture extension office of the Ministry of Agriculture. Seeds of several crops have been given for demonstration. The extension service has cooperated in the field days of the past two years.

Until October 1960, the Department of Plant Science had no staff and no one to head the department. Since then considerable progress has been made in developing a skeleton staff for the minimum teaching and the development of a crops research program in the research institute.

In 1961, the research institute of Ataturk University was organized and approved by the University Administration and the Minister of Education. In the spring of 1961, it was a problem to get the general manager of Ataturk University farm to prepare dry land for research. In 1962 through the research institute, land was prepared early, therefore, the field experiments were much better in 1962 than 1961. There is much work to do in the future in developing a sound program of research in plant science at Ataturk University. Results of the past two seasons have been phenomenal considering the facilities and the staff to initiate projects.

The Plant Science Department of Ataturk University has made considerable progress during the past few months. A definite step forward was made when we moved into the new building. One assistant received his Doctorate during this period. The routine teaching of the first semester of 1962-63 was completed. Two assistants completed their research outline for the start of their doctorate. Experimental data analysis of the previous year's experiments were completed. Experiments were started in the greenhouse and most detail of the experiment projects

for the field in 1963 were formulated. Seed for all the research plots has been procured or arrangements made for future delivery.

Many of the assistants have been active on committees. The committees concern revision of Ataturk University regulations, approval of projects submitted to the Research Institute, a review of progress reports on previous approved projects, University farm budget, University farm cropping system, and others.

I. Curriculum Development

Since no plant science majors matriculated until the fall semester of 1961, the problem of teaching major courses is in the future. The teaching load has involved only courses required of agriculture students and those required in majors of other departments. The first students to graduate in plant science will be in July of 1965.

A. Plant science subject areas:

1. General crops

- Pasture and range management
- Forage crops
- Cereal crops
- Industrial crops
- Plant breeding

2. Horticulture

- Vegetables
- Fruits
- Ornamental flowers and landscaping

3. Plant protection

- Entomology
- Plant pathology
- Fungicides, insecticides and herbicides

B. Proposed subjects to be taught in Plant Science:

1. Courses offered in Plant Science

Plant Science 101 - Pasture and range management	3 credits
Plant Science 102 - Vegetable crops	3 "
Plant Science 103 - Field crops	3 "
Plant Science 104 - Fruit crops	3 "
Plant Science 105 - Industrial crops	3 "
Plant Science 106 - Forage crops	3 "
Plant Science 201 - Plant breeding	3 "
Plant Science 258 - Field plot technique	"
Plant Science 202 - Ornamentals & landscaping	3 "
Plant Protection 207 - Weed disease & insect control	5 "
General entomology	3 "

2. Courses required of Plant Science majors but taught in other departments:

Botany 102 - Plant physiology	3 credits
Agr. Engineering 51 - Irrigation and drainage	3 credits
Soil Science 52 - Soil conservation & management	3 credits
Soil Science 257 - Soil fertility	4 credits

C. Teaching load to end of Spring Semester 1963:

Name of Course	Credits	Year	Number of Students (approximate)
Plant Science 1 & 2	6	1960-61	178
Plant Science 1 & 2	6	1961-62	120
Pasture and range management (Plant Science 101)	3	1961	90
Pasture and range management (Plant Science 101)	3	1962	94
Plant Science 1 & 2	6	1962-63	134
Plant Science (Horticulture 102)	3	1963	40
Plant Science (Horticulture 202)	3	1963	55

Two courses were completed at the end of the first semester, Beginning Plant Science I and Pasture and Range Management. Dr. Fahrettin Tosun assisted Dr. John Winter with a beginning course in Plant Physiology. The second semester started off with three courses given: the second part of the general Plant Science course, a course in general Horticulture, and a course in Ornamentals and Landscaping. All these courses were interrupted by a general strike of the agricultural students beginning March 11.

D. Plant Science Department major proposal:

Since the plant science courses have such a wide range of subject matter, it has been proposed that students major in three areas, namely: (1) General crops, (2) Horticulture, and (3) Plant protection. This deviates from the general rule established by other Turkish universities in that students majoring in a department take all the courses offered in that department. This will require a separate curriculum for each major.

E. Course curriculum subjects to be offered for other department majors:

In the general subjects Horticulture 1 (General Horticulture) is to be offered to the curriculum in the Department of General Agriculture. Plant Science 101 (Pasture and range management) is required of general agriculture and animal husbandry. The plant protection courses are required of all students in general agriculture. The general agriculture department has students in the freshmen and junior years. At present competent staff have been available for the teaching of the required courses. During the academic year 1963-64, an extra staff member trained in plant protection will be required to teach the plant protection courses.

II. Staff Development

A. Present staff:

<u>Name</u>	<u>Earliest Faculty Rank</u>			<u>Training</u>	<u>Arrival Ataturk University</u>
	<u>Dr.</u>	<u>Docent</u>	<u>Prof.</u>		
Ali Istar	1958	1963	1967	2 years - Uni. of Calif.	1961
Huseyin Apan	1965	1969	1973	B.S. Ankara	1962
Fuat Tariverdi	1964	1968	1972	Europe (Germany) - 2 years	1962
Sabahattin Senol	1962	1966	1970	1 yr. Amer. Min. of Ag. Prog.	1960
Erol Gunel	1964	1968	1972	Agr. Extension Staff-2 years	1962
1)Fahrettin Tosun	1961	1965	1969	4½ years - Uni. of Nebr.	1961
2)Ihsan Ergin	1965	1969	1973	B.S. Ege Uni.	1960
Ismet Baysol	1965	1969	1973	Ministry of Agriculture	1962
3)Hasan Yuksel	1957	1962	1966	2 years - Uni. of Calif.	1961
Coskun Koycu	1966	1970	1974	B.S. Ataturk Uni.	1962

- 1) Ph.D. University of Nebraska 1961
- 2) On leave Army--returns September 1963
- 3) Docent October 1962

Dr. Assistant Ali Istar, Assistant Sabahattin Senol, Dr. Assistant Fahrettin Tosun and Docent Dr. Hasan Yuksel were granted lectureships in the fall of 1962. They are all competent teachers and well qualified to teach courses in their respective fields without supervision. All are proficient in English and could be assigned teaching in other courses or supervise other assistants in preparation of course material.

B. Additional Staff:

We are always looking for good assistants. Many qualified people are reluctant to come to Erzurum to live. The best source of qualified people is in the Ministry of Agriculture. The handicap is that experience accounts very little for academic advancement. About the only concession given by the Administration, which is governed by Turkish law, is that two years only be granted before a candidate is eligible to take the exam for a doctor's degree instead of the four years required by assistants without experience.

I am reluctant to accept new staff members even in the Docent rank unless they have had training in a foreign university. Travel or work in a foreign country unless having direct connections with a university is not enough qualification to insure the right philosophy in developing a land-grant type university.

C. Participant Training:

1. Staff members who have had participant training:

Ali Istar	2 years Ataturk Uni. program
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Fahrettin Tosun	4½ years Ataturk Uni. program
Hasan Yuksel	2 years Ataturk Uni. program
Sabahattin Senol	1 year Min. of Ag. program

2. Other staff member training:

Fuat Tariverdi -- Europe Germany, Holland, Belgium to study landscape gardening.

3. Participant prospects:

At present only one staff member is ready to receive training in the United States. Sabahattin Senol will receive his doctorate in January 1963. He is well qualified to continue his studies at any time.

If the doctor degree requirement is eliminated, Ismit Baysol could be a participant in the summer of 1963. He will have completed his year of probation. It will require him a minimum of 2 years to complete a doctor degree. The new assistants, regardless of the doctor degree requirement, are at least 2 years away from becoming proficient in English.

We would welcome a good participant in cereals for training in the U.S.

III. American Assistance

Unless Fahrettin Tosun is relieved of his directorship of the research institute, there is no hope among the present docent and assistants of developing an administrative head of plant science until 1967. Headship of specific areas can be obtained from the present staff earlier. The present training is guided in that direction.

Plant science is a major subject matter activity in the development of the research institute and university extension activities. Also development of Ataturk University farm is a major field for assistance from a plant science advisor.

IV. Research Program

In late 1960, the Ministry of Agriculture transferred the land and buildings of the Erzurum experiment station to Ataturk University. At present Ataturk University has been assigned the agricultural research activities for this area of Turkey. The plant science department for two years has been very active in initiating a research program. Land was made available in 1961 with water rights which was formerly used by the previous experiment station. Two projects were continued that had been included in previous experiments, namely, alfalfa and sanfoin for forage yields. A series of plots were continued for seed production of grasses and legumes.

A. Research Projects:

All of the research projects are pointed to the production of food for the people, forage for winter feeding, and pasture improvement to carry a heavier cattle population on soil ranging from very poor to very good. A listing of the many projects follows:

1. Forage yield trials with alfalfa and sanfoin.
 - a. Spacing rate of seeding and fertilizer trials.
2. Grasses and legumes for seed production.
3. Forage and grass adaptation trials.
4. Rotation plots on dry land farming.
5. Stubble mulch with both spring and winter wheat.
6. Potato variety trials.
7. Potato breeding.
8. Sugar beet spacing trial.
9. Corn variety tests (field and sweet).
10. Head lettuce trials.
11. Tomato varieties.
12. Tomato variety trials under boxes, hot caps and open planting.
13. Corn variety and date of planting.
14. Miscellaneous vegetable crops.
15. Vegetable variety adaptation on muck soil.

Many of the research projects are of continuing nature, others will be conducted for three years. The pasture and rotation plots will be continued for many years.

Approximately 200 acres were seeded in the spring of 1962 to grasses and legumes for seed production. Pasture experiments have been temporary postponed because desired seeds were not available in sufficient amounts. If seeds were available the present price would be prohibitive.

Head lettuce and tomato plants were given to the extension service and placed in demonstration trials in Erzurum province. Sweet corn and field corn seeds were also included in test plots of the extension service.

Many varieties of potatoes were planted in the greenhouse for hybridization. A pot experiment was started in the greenhouse with legumes and grasses to determine the yield of clipping heights and the effect of clipping on the root and top development.

One assistant made an extensive trip to collect grape canes of many varieties. The canes were tagged during the growing season last summer. An experimental vineyard will be started at the branch farm of Ataturk University at Elazig. The collection comprises many varieties of table and wine grapes.

The research program not only provides research information, it also has made excellent resource material for laboratory teaching and subjects to

discuss and observe at our field days. A progress report for 1961 was mimeographed in English and a Turkish translation has been recommended, if and when a translation is available. Another progress report is in preparation for the 1962 data.

B. Projects to be added:

Two new projects will be added to the research program in plant science if D.S.I. gets the wells cleaned. The general director of D.S.I. has given orders to clean the university wells. This has been in the conference stage for one and one half years. Ground water resource advisor of U.S.A.I.D. has been contacted. The new projects are (1) a rotation plot under irrigated conditions, and (2) intensive seed production of grasses and legumes under irrigation.

C. Budget:

All research projects require an outline and in this outline the required lira for conducting the project is listed. The assistants contact the administration for funds to carry out the work on the projects. So far I have not been asked to give advice on the budget of the department. Before the assistants are allowed to start a project they must be given assurance from the administration that the money is available. Until this year there has been plenty of money for research. No doubt in the future when more projects are initiated, a closer supervision of the budget should be enforced.

V. Farm Development

Ataturk University farm is utilized for livestock. Feed and forage for the animals becomes an important part of the farm operations. The plant science department has an important role in this development. The American advisor, along with four assistants, are on the general farm committee. The American advisor and Dr. Fahrettin Tosun are prime advisors to the farm director.

After two years of dismal failure with the sugar beet crop on the organic soil, advice was given on known recommended practices; namely, working of the soil with field cultivators to break up the phragmyter, cultipacking the soil and sub-irrigation of the soil by placing a dam in a drainage canal. The dam idea had to have D.S.I. approval before it could be constructed. This involved many conferences with the D.S.I. officials. After a fashion a temporary dam was constructed--net results 2167 metric tons of sugar beets from 225 acres. The beet tops provided feed for the livestock for nearly 2 months. Many tons of sugar beet tops were placed in a pit silo together with all the corn stalks from the corn research plots. This along with the sugar beet pulp allotted to the farm because of the extra delivery of beets, provides excellent feed for the livestock.

Less spectacular advice has been given in other areas. This time is not wasted for it has been an excellent opportunity for training assistants in techniques of farming.

VI. Extension Activities

Previous mention has been made to the providing of seeds for village demonstrations. Many villages have been visited. Many village people have come to see the experiments. One of my assistants reported to me recently that the farmers who saw the sweet corn at field day have asked for seed. We did produce several hundred kilos of sweet corn seed.

The pasture and range management assistant has given advice and aid in the establishment of several U.S.A.I.D. sponsored pasture demonstrations in this area.

VII. Physical Plant Requirements

Until the new agricultural buildings are completed, the plant science department will have to depend on crowded and make-shift quarters. Indications are the earliest the agricultural building will be available is in the late fall of 1963. In the meantime every assistant will be canvassed to obtain the need of each for office space, laboratory space and research facilities. Planning to utilize the greenhouse space will have to be initiated.

Many pieces of equipment will be needed to equip the laboratories. Several pieces of equipment have already been purchased and they are being used in the present teaching and research.

VIII. English Teaching

If the assistants do not already have a proficient knowledge in English when they are placed on the Kadro, studying English is a must for the first year. Most assistants who have been in the U.S. for training stress the need of English for research workers.

Many participants have been sent to the U.S. for study when their English has been deficient. An American in residence is, in my opinion, a must to teach English to the assistants and particularly to the prospective participants. This can be accomplished by either putting a full time English teacher as a member of the contract team or arranging to have an instructor provided in residence at Ataturk University in Erzurum by the Georgetown Language School. The assistants are needed at Erzurum to assist in teaching and research.

IX. Keeping the Assistants Informed

I doubt if there are any English speaking assistants in the plant science department who have not been consulted on nearly all of the points covered in this report. The assistants with lectureships have full charge of the classes, others assist in taking roll, providing equipment for laboratory exercises and grading papers. The assistants are given full responsibility in their research. The assistants formulate most of the replies to the letters. They formulate all letters for request for equipment from the administration. They have full charge of the laborers and work through the various farmers in the research institute.

Although most of the students we have taught come from other departments, we have not encountered any disciplinary problems with the students. Many U.S. visitors

who know other universities in Turkey marvel at the near perfect class attendance we have at Ataturk University.

X. Field Trips

Two trips were made to Hasankale to observe seed potatoes in storage. The potatoes were keeping very well and only a few short sprouts were appearing on only the early varieties. The conditions were satisfactory to warrant good viable seed. The farmers were offering just average seed for 75 kurus a kilo; in U.S. dollars this amounts to approximately \$3.60 a hundred weight. It is not difficult to obtain yields of 500 bushels per acre with good seed and cultural practices. This was accomplished on the Ataturk University farm the past two years with many varieties. Arrangements were made with one potato grower to test the seed rogued and reasonably free from disease with his seed. The Ataturk University potatoes were obtained from this farmer in 1960.

An extensive field trip was made to Ankara and Eskisehir with assistant Coskun Koycou. At Eskisehir we were shown their experimental plots of winter wheat, oats and barley. The director, Mr. Rafel Gorek was a most gracious host. He invited Coskun to spend some time in late May and June observing the harvest. Since Coskun will be working with cereal crops it will give him an opportunity to learn more about conducting experiments at Ataturk University. Winter barley of early maturity should be a good crop because the crops will start filling much sooner than spring barley, coming at a time when the temperature is most favorable. In many areas very little irrigation would be needed as the crop would mature before the heat of the summer.

At the Eskisehir sugar factory farm silage was observed that had been made from a mixture of sunflowers and corn. The alfalfa and grass silage had been fed. The farm manager was enthusiastic about silage for feed. They have not used sugar beet tops for silage.

Sugar beet experiments were discussed with the research staff of the sugar factory. They were interested in our sugar beet experiments on organic soil at Ataturk University. The Soils and Engineering sections were working on a machine for placement of fertilizer. Apparently they are having difficulty convincing the administration on this method of fertilization for they asked me what percentage of our beets in the U.S. were planted with fertilizer placement. Of course, my answer was one hundred per cent.

Conferences were held with many professors, docents and assistants of the Plant Science Department at Ankara University. The topic of hybrid seed corn production in Turkey was discussed. The experiment station at Samsun will send to Ataturk University seed of their hybrids to compare with those from Wisconsin, Minnesota, and Michigan.

XI. Seed Distribution

We have had requests for seeds from Professors, Experiment Station directors and farmers in many villages. All this has come about through the many visitors who have witnessed the excellent experiments of the past two summers. The crop

seeds in most demand are head lettuce and sweet corn followed by tomatoes, radishes, and sweet onions. Roots of carrots (four varieties), red garden beets, and mangels (animal beets), have been stored for seed production in 1963. Potatoes (many varieties) and head lettuce are also included in the seed increase program.

Preparation and seed purchases of legumes and grasses for seed increase have not been neglected. Approximately 200 acres of legumes and grasses will be producing seed this year, another 600 acres were prepared last summer for seeding this spring.

XII. Advanced Degrees

Sabahattin Senol completed all the requirements for a doctorate degree. Professor Celal Tariman came from Ankara University for the thesis and oral examination. Preliminary final outline of thesis problems for four more assistants were formulated during this period.

Hasan Yuksel received his docent degree in October 1962. He is now a member of the Professor committee under the classification of plant protection.

XIII. Progress Report of 1962 Research

Considerable time was spent by the assistants getting the experimental data of 1962 analyzed and a report to include with the project outline. An English progress report of the 1962 research was in preparation for mimeographing similar to the report of research progress in 1961.

XIV. Urgent Needs

If the College of Agriculture at Ataturk University is to become a leader in the agricultural field of the Middle East, more basic courses have to be added in the sciences. Our job is to train people to think. If they have this capacity through training, they will become better teachers, government service employees and better business men. In conclusion, I would like to conclude with the following thought provoking quotation which an able scientist so aptly stated: "Farming is not an industry in Turkey so far, it is simply a way of life." This could and should be changed to read: "Farming is an industry and the way of life." The farm should provide raw materials and youth for the industrialization of the Nation.

DEPARTMENT OF BOTANY
Ataturk University

Prof. Dr. John M. Winter

During this period the first semester at Ataturk University was completed. The class in Botany I finished the work for the semester in both laboratory and class assignments. Two lecture sections were held each consisting of two class periods per week. The group of some one hundred and thirty students were divided into four laboratory sections of about thirty-two or three students each. Each laboratory section met for a single two-hour period per week. The course carried a three-semester hour credit.

At the end of the semester the usual final examination was given at the time listed by the scheduling committee. Grades were determined and turned in to the records office. The work for the Botany I laboratory, lectures and tests as well as the final grades were the responsibility of Dr. Instructor Mehmet Oner, who has been trained in the United States and who is proving himself to be an excellent instructor.

A class in Plant Physiology was offered on a non-laboratory basis at the insistence of the Rector and of the Nebraska Group leaders, this despite the objection of the members of the staff of the Botany Department. We objected to non-laboratory courses in Plant Physiology because it is not a course which lends itself to lectures only. In addition there is too great a tendency to offer science subjects here at Ataturk University without laboratory work. This is not good and results in sub-standard course offerings. I am of the opinion that once offered on a non-laboratory basis science courses will continue to be given on that basis. It is cheaper, less work on the part of both instructor and student, and involves far less planning.

In any case a good, rigorous series of lectures were given and the usual series of tests and examinations were scheduled. About sixty-five junior and senior students majoring in "Soil Science" took the course though it is not ordinarily included in their curriculum. The lectures were devised and given by Dr. John M. Winter. Dr. Fahrettin Tosun served as interpreter and handled the contact work regarding attendance, tests and grades.

A Plant Physiology laboratory should be set up before the course is offered again. A minimum list of apparatus and materials was incorporated into my report on the "Development of the Botany Department at Ataturk University." Only a part of the materials listed are now in the stores of the University and a substantial sum of lira must be allotted to this project if the laboratory is to be satisfactorily equipped.

Courses offered in Botany are service courses for the various departments in Agriculture. Their curricula require only Botany I and II and in some cases Plant Physiology. With no major in Botany permitted by the Administration, new courses are not required or contemplated for the next year. It would appear that no students would take such courses. Staffing problems (discussed below) would make new offerings in Botany extremely difficult.

If the University proposes to enlarge its student body after moving to the new facilities on the new campus and if this will mean an increased number of students in the College of Agriculture who take Botany I and Botany II, then a greatly enlarged staff will be necessary. If three or four hundred students enter the Botany courses, then six or eight resident assistants and instructors will be required to adequately staff the department. Where these added instructors are to be secured is a great problem.

I am outlining below the staff requirements in Botany for next year with no increase in enrollment taken into consideration. To meet this request for three new Assistants in the department and to anticipate the possibility of one or two participants for next year in the United States means that four or five new Assistants will be required as of next fall.

The Botany I and Botany II classes are to be taught hereafter by Dr. Lecturer Mehmet Oner. He is now giving the lectures in Botany I. Mr. Oner is also responsible for the four laboratory sections in Botany I. Since no Assistants are available to help him in these laboratories, the services of the Nebraska Group Botanist are necessary on occasion.

If a replacement for Dr. John M. Winter in the Nebraska Group is not contemplated, then Mr. Oner will need two Assistants whom he can train to take charge of the Botany I and II laboratories and to take over the grading of papers and other paper work involved in the conduct of the lectures in these courses.

If such an arrangement is made for help in Botany laboratories, then Mr. Oner will be able to devote his major effort to the development of a course in Plant Physiology. Mr. Oner has taken two courses in Plant Physiology at the University of Nebraska, one at the graduate level.

The proposed course in Plant Physiology should be given over two semesters and should consist of two lectures and one three-hour laboratory period per week. It would carry three semester hours of credit.

Mr. Oner would need two assistants to handle the laboratory work in this course. One of these assistants might also assist in Botany I and II laboratories but the other should be employed exclusively in the Plant Physiology laboratory. He would have full time responsibility for laboratory materials, preparation of apparatus for experiments and for growing of plants for laboratory use.

A greenhouse is essential for the growing of plant materials. Until a greenhouse is available, a plant growth chamber can be constructed by local carpenters and electricians. As stated above, the employment of at least three assistants in Botany is necessary. They will be required for the classes to be ordered in the fall of 1963.

Under the plan suggested here, the four laboratory classes in Botany I or II will be scheduled in the afternoon as now given. The several sections of Plant Physiology laboratory would need to be scheduled for the morning since supervision by the instructor would be necessary. Not more than 20 students can be effectively taught in a single section.

If a Nebraska Group Botanist is sent to the University to replace the present Botanist, I suggest that he be a person especially trained in Plant Physiology. Such a person might well prefer other schedules than those outlined above but in any case, he would need a minimum of three new assistants.

Mr. Mehmet Oner should be encouraged to attain a Doctor's degree in the minimum time. He wishes to do his thesis work in the field of soil fungi and antibiotics. Meager or no opportunities exist in Turkey for research in this field of study. He should be sent to England or the United States for at least two summers to work at a University or commercial center where work of this nature is being done. This program would enable him to obtain the data for his thesis which he could complete at the University. Such a program would not interfere with his work as a teacher at the University.

The Botany Department has been using the thirty-five compound microscopes at present in the laboratory used jointly by Botany and Zoology. I am informed that these are the property of the Zoology Department. On removal to separate laboratories in the new buildings on the new campus, the Botany Department will require the use and possession of fifty student-type microscopes. There are this many scopes at present in storage with the equipment purchased by AID for the University. The microscope problem of the department will be solved if it is given priority on these scopes. If these are not made available, then Botany II cannot be offered during the second semester since the work in this course is largely based on the microscopic examination of the structures and organs of selected representatives of the various groups of the Plant Kingdom.

The matter of an operating budget is difficult to consider since annual costs depend primarily on the size of the enrollment and on the amount of support made possible for the research of the staff members. The matter of equipment for new courses is also a subject for consideration. If the Botany Department offers any courses in addition to those now given or contemplated, i.e., Botany I and II and Plant Physiology, then additional investment in new apparatus and materials is necessary. A department will not thrive unless it offers Advanced courses in addition to the service courses offered primarily for the benefit of Agricultural students. Indeed, since we find it impossible to find trained Botanists in Turkey to fill our staff needs, it would appear necessary that we train our own staff personnel. This means the equivalent of a Botany major for some students at least.

The undergraduate courses which should be taken by the student preparing to teach Botany are as follows: Plant Morphology, Plant Physiology, Plant Ecology, Plant Cytology and Cytogenetics, Plant Anatomy, Plant Taxonomy and Mycology. It is obvious that a graduate in Agriculture will not have the background to do either teaching or research and thus the suggestion that such a student could serve as an assistant in Botany has no validity. It is my suggestion that if such students are found to be the only type available for Botany assistantships, then they should be sent at once to the United States on the participant program for basic training in Botany. This program should include only such graduate courses as may be possible in addition to the basic course. Research should only provide materials for a Doctor's thesis upon the return to Turkey of the student. He should also be given actual laboratory work as an assistant in a General Botany laboratory. The student should not expect an American Master's Degree. This should prove profitable for both the student and the University since the Master's Degree from an American

College has little value in the Turkish system of education. Thus it seems quite impossible at the present time to project a realistic budget for future years.

A budget for materials, supplies and smaller items of equipment should probably be placed at three to four thousand dollars per year. There is a total lack of visual aids, projectors and other equipment usually found in a department of Botany.

A salary budget for the Department is still more difficult to estimate. The amount listed would depend on the degree of success in building a staff, the rank of the new staff members and whether added inducements for service in Erzurum are offered. I am not optimistic as to the availability of competent persons for the Botany faculty. It would appear that new assistants must come to the department through the participant program but at present there are only a few prospective participants available. In any case, the problem of assistants is an immediate one, namely, for the next semester and the next year. Any participants who are recruited will not be available for teaching in the department for one or two years in the future.

The period between the first and second semesters was utilized by the University authorities to move the physical plant from the old site to the new campus. The entire University now occupies the new Chemistry building. Botany is housed in a new laboratory and has acquired enough microscopes so that the laboratory work in Botany II is now possible. The laboratory is not yet equipped with seats. They have been promised and I understand they are now being fabricated in the University carpenter shop. If they are furnished within a week or two no handicap will be encountered since the Agricultural students have been on a strike for the past several weeks. No classes have been possible in Botany since this category of student makes up the group enrolled in Botany.

As the result of advertising on the part of the Rector last fall, we have had three persons take the examinations for the assistantship in botany. Two of these have successfully passed these tests. These young ladies are both, at present, holding instructorships in botany at the Botanical Institute of the Ankara University, and both have their thesis work well along for the Doctor's degree.

The first of these, Mrs. Aynur Unal, has based her thesis on the collection and identification of the mosses of Turkey. She has collected over six hundred species and has sent the more difficult materials to England and Germany for identification. She has completed this work, her thesis is acceptable, and she will be ready for the examination before I return to the United States in July. She has served three years as an assistant at Ankara University.

The second young lady, Miss Ozden Arun, is doing research in plant anatomy; making detailed studies, both morphological and statistical, of the structure of the leaves of certain xerophytic plants. She also expects to complete her thesis in time for the scheduling of her examination before July 1st.

It is my understanding that these young ladies will be placed on the "kadro" and will transfer to Ataturk University from Ankara within the next few weeks. The addition of two assistants to the Botany staff will help very much to strengthen the work of the department.

I have been serving as the chairman of a committee appointed by the Rector to make an inventory of scientific materials owned by the University and particularly of the materials purchased by A.I.D. This has been a long and unpleasant task since the storage depot is cold and damp. This inventory is progressing nicely and should be completed within a short period of time.